

IRON AGE

Semi-Annual Index

July - December, 1971

Volume 208

Microfilm Copies

Complete microfilm copies of The IRON AGE, text and advertising, are available beginning with Vol. 161 (1948) through the issues covered in this index. For information write to University Microfilms, 313 N. First St., Ann Arbor, Mich.

IRON AGE Index

Volume 208 • July - December, 1971

July - December, 1971

Volume 208

SUBJECT

A

ACF Industries, Inc.:

NEP Myth: 'Too Early to Tell', by K. W. Bennett, Aug 26 p 41
 Prices: What You Want Isn't Always What You Get, by K. A. Kaufman and G. J. McManus, Dec 2 p 60

AMF, Inc.:

Best Seller '72: 'Run Robot, Run', by K. W. Bennett, Dec 23 p 26

Abex Corp.:

Industry Warms Up to Supercold, by R. A. Wilson, Aug 26 p 55

Abrasives

Abrasives Slice Up the High Alloys, by R. A. Wilson, July 15 p 62
 Carbide Fabric Dresses Up Parts, by N. B. Schwartz, July 22 p 60
 Carbide Makers Get Hip with HIP, by R. A. Wilson, Sept 9 p 51
 Carbide Tooling Gains an Edge, by J. E. Sanford, Dec 9 p 66
 Extend Use of Throw-Away Carbide Inserts, Dec 16 p 31
 'Fuzzy' Deburs the Inaccessible, by B. D. Wakefield, Aug 12 p 78
 Grinding Industry Turns to Alloyed Abrasives, J. J. Obrzut, Oct 28 p 48
 How Fast Can Abrasive Machining Go? by R. A. Wilson, July 22 p 34
 Industrial Diamond Future Begins to Sparkle, by K. W. Bennett, Sept 23 p 46
 A Quantum Jump in Electroplating? by T. H. Malim, July 15 p 57

Acoustics

see: NOISE

Addison Machine Engineering Co.:

Thin-Wall Tubing Allures Steelmakers, by B. D. Wakefield, Sept 30 p 60

Adhesives

Adhesive Bonding Holds Plated Strip to Cast Iron Ways, by T. H. Malim, Oct 21 p 78
 Automakers Like "Gluing", by T. C. DuMond, Aug 19 p 48

Aerocet General Corp.:

U.S. Shipyards Turn the Corner, by B. D. Wakefield, Sept 16 p 77

Aerospace

Aero Bargainers Fly Unfriendly Skies, Dec 9 p 19
 Aerospace Forgers Find Commercial Road Narrow, by R. A. Wilson, July 8 p 36
 Aeroworkers Await Word: PB Sets Exception Rules, Dec 23 p 18
 B-1 Bomber Mockup Weighs 45,000 Lb., Nov 26 p 29
 Exact Post-Mortem on Fall of a Giant, Dec 2 p 64
 Felt Goes into Outer Space, by T. H. Malim, July 1 p 66
 'Fuzzy' Deburs the Inaccessible, by B. D. Wakefield, Aug 12 p 78
 GE Slashes Jet Engine Workers, July 29 p 15
 Is Space Shuttle an Industry's Ride to Recovery? Oct 14 p 27

Japan Holding Back on Steel Exports; Declines Jet Deal, Dec 23 p 22

Japanese Seeking Development Aid for 'United' Aircraft, Nov 4 p 27

Plastic Missile Fired Successfully, Dec 9 p 27

Powder Metallurgy: A Sleeping Giant, Oct 7 p 63

R & D Layoffs Cut Into Industry Muscle, by G. J. McManus, Oct 28 p 27

Satellites to Survey Earth's Natural Resources, Nov 25 p 29

Technology Bank Draws Interest, by T. C. DuMond, July 29 p 39

Transit Poker Draws a Card, by S. H. Hockenberry, Sept 23 p 41

UAW Takes Wraps Off Aerospace Bargaining, Aug 5 p 18

Why Are there So Many Fasteners? by H. H. Cunningham, Aug 19 p 44

Winging Well Without Aerospace, by K. W. Bennett, Dec 2 p 53

Aerospace Industries Assn.:

Exact Post-Mortem on Fall of a Giant, Dec 2 p 54

Aetna Tool & Die Co.:

Industry Warms Up to Supercold, by R. A. Wilson, Aug 26 p 55

Affiliated Hospital Products, Inc.:

Medical Care: Diagnosis Prosperity, by K. W. Bennett and C. J. Suchocki, Sept 2 p 32

Aga AB (Sweden)

Infra-Red Checks Downtime, Sept 16 p 82

Airbags

Can Detroit Weather Potomac Storm? by D. N. Williams, July 29 p 25
 Safety Air Bag Inflated, Deflated in Three-Way Clash, by D. N. Williams, Dec 23 p 81

Airco Welding Products Div.:

Oxy-Fuel Flames Fan Hot Metal, by R. R. Irving, Sept 2 p 45
 Flame Cutting Warms Up to NC Tape, by J. E. Sanford, Aug 5 p 44

Air Preheater Co.:

Must Small Plants Go Down the Drain? by J. J. Obrzut, July 1 p 49

Air Products and Chemicals, Inc.:

Oxy-Fuel Flames Fan Hot Metal, by R. R. Irving, Sept 2 p 45
 Technology Bank Draws Interest, by T. C. DuMond, July 29 p 39

Air Reduction Co., Inc.:

Cyclops Introduces Electron Beam Stainless, by G. J. McManus, Nov 25 p 62
 NEP Myth: 'Too Early to Tell', by K. W. Bennett, Aug 26 p 41
 Plasma Cutting Takes on Steel, by R. R. Irving, Aug 26 p 62
 That 'Blue Sky' on Steelmaking's Horizon, by G. J. McManus, Dec 2 p 65

AiResearch Corp.:

'Fuzzy' Deburs the Inaccessible, by B. D. Wakefield, Aug 12 p 78

Air Transportation Assn.:

Why Are there So Many Fasteners? by H. H. Cunningham, Aug 19 p 44

Ajax Magnathermic Corp.:

Forgers Get Hot for Furnaces, by K. W. Bennett, Oct 7 p 52

Alan Wood Steel Co.:

Has Industry-Campus War Lost its Bang? by J. M. Beattie, Dec 2 p 58

Alaska

Gas Pipeline Challenges the Elements, by B. D. Wakefield, Nov 25 p 71
 USSR Oil Leak: A Warning to Alaska's Pipeliners? by I. G. Black, July 8 p 41

Albina Engine and Machine Works

Div.:

Plasma Cutting Takes on Steel, by R. R. Irving, Aug 26 p 52

Alcan Aluminum Ltd.:

Alcan's Arvida Rolling Mill: The Envy of the Industry, by James Beizer, Sept 23 p 81
 Europe, Imports Appeal Starts to Fade, Aug 26 p 46
 The World Takes Inventory of its Aluminum Problems, by James Beizer, Nov 25 p 109

Alcoholism

Learn to Spot Tipsy Workers, Aug 12 p 27

Allegheny Ludlum Industries, Inc.:

Die Casting Gets a New Alloy, Sept 9 p 69
 Is Inventory Spurt Now in Stock? Sept 30 p 33
 R & D Layoffs Cut Into Industry Muscle, by G. J. McManus, Oct 28 p 27
 Steel Begins to Lay Old Warriors to Rest, by G. J. McManus, Dec 16 p 64
 Steel Pact: Now the Hangover Begins, by G. J. McManus and K. A. Kaufman, Aug 5 p 39
 Steels Suit Golf Clubs to a Tee, by T. C. DuMond, Aug 5 p 51

Allegheny Ludlum Steel Corp.:

SEE: Allegheny Ludlum Industries, Inc.

Allen-Bradley Co.:

Phasmod Strikes Again—Now it's Systems, by R. A. Wilson, Dec 16 p 62
 Tool Builders Cut Down by Phase II Doubts, by R. A. Wilson, Dec 2 p 65

Allied Chemical Corp.:

Safety Air Bag Inflated, Deflated in Three-Way Clash, by D. N. Williams, Dec 23 p 81

Allis-Chalmers Mfg. Co.:

Mill Equipment: Color it Black with Gray Streaks, by G. J. McManus, Oct 7 p 53

Alloy Metal Products, Inc.:

Computer Takes Heat Off Melt Shop, by B. D. Wakefield, Sept 23 p 60

Alloys

Needed: The Right Alloys to Tame Automobile Exhaust Emissions, by W. G. Patton, Sept 30 p 44

Aluminum

Aluminum Prices: Sick Patient Deals in Black Humor, by James Beizer, Sept 30 p 65
 Aluminum Shipments Up 4 Pct in First Half '71, by James Beizer, Sept 9 p 101
 Aluminum Shows Steel How to Get Flat Sheet, by T. C. DuMond, Dec 9 p 60
 Continuous Inoculation: The New Grain Refiner, by R. R. Irving, Oct 28 p 44
 Estimating Aluminum Welding Costs the Easy Way, Oct 21 p 74
 Even Aluminum Clouds Have Silver Linings, by James Beizer, Dec 16 p 97
 If at First You Don't Succeed—Wait Until Next Year, by James Beizer, Dec 9 p 79
 Latin Deposits: A Banker's Game, by James Beizer, Aug 19 p 38
 New 7000 Series Alloy is Strong, Tough, Aug 5 p 24
 Precast Aluminum Gets Tough Finish, by B. D. Wakefield, Nov 4 p 65
 U. S. Shipyards Turn the Corner, by B. D. Wakefield, Sept 16 p 77
 The World Takes Inventory of its Aluminum Problems, by James Beizer, Nov 25 p 109

Aluminum Assn.:

Estimating Aluminum Welding Costs the Easy Way, Oct 21 p 74

Aluminum Co. of America

Aerospace Forgers Find Commercial Road Narrow, by R. A. Wilson, July 8 p 36
 Aluminum Cutbacks Take Worker Toll, Nov 11 p 19
 Aluminum Prices: Sick Patient Deals in Black Humor, by James Beizer, Sept 30 p 65
 Antidote for Ill Aluminum: Cutbacks, profits, Research, by James Beizer, Sept 16 p 121
 Even Aluminum Clouds Have Silver Linings, by James Beizer, Dec 16 p 97
 Latin Deposits: A Banker's Game, by James Beizer, Aug 19 p 38
 Losing Management Touch? Blame the Megrim, by S. H. Hockenberry, Nov 15 p 49
 Modular Homes: A Gold Mine or Land Mine? by K. W. Bennett, Nov 11 p 54
 New 7000 Series Alloy is Strong, Tough, Aug 5 p 24
 Start Spreading the Word—and Keep at It, Oct 14 p 25

Aluminum Co. of Canada, Ltd.:

Aluminum Shows Steel How to Get Flat Sheet, by T. C. DuMond, Dec 9 p 60

Aluminum Industry

Alcan's Arvida Rolling Mill: The Envy of the Industry, by James Beizer, Sept 23 p 81
 Alumina Residue Provides Useful Products, Dec 23 p 24
 Aluminum Cutbacks Take Worker Toll, Nov 11 p 19
 Aluminum Industry Easing Out of Doldrums, by James Beizer, Nov 4 p 62

Aluminum Prices: Sick Patient Deals in Black Humor, by James Beizer, Sept 30 p 55

Aluminum Refuses Realistic Pricing After Big Cut, by James Beizer, Oct 14 p 65

Antidote for Ill Aluminum: Cutbacks, Profits, Research, by James Beizer, Sept 16 p 121

Even Aluminum Clouds Have Silver Linings, by James Beizer, Dec 16 p 97

If at First You Don't Succeed—Wait Until Next Year, by James Beizer, Dec 9 p 79

Justice Dept. Hits Reynolds in Antitrust Suit, by James Beizer, July 22 p 63

The World Takes Inventory of its Aluminum Problems, by James Beizer, Nov 25 p 109

Aluminum Shapes, Inc.:

Oxy-Fuel Flames Fan Hot Metal, by R. R. Irving, Sept 2 p 45

Amax Lead & Zinc, Inc.:

Price Moves Dominate—Up, Down, Hesitant, by James Beizer, Aug 5 p 67

AMAX Petroleum Corp.:

"Bargaining Fat" in Puerto Rico? by James Beizer, Oct 21 p 107

American Airlines, Inc.:

Why Are there So Many Fasteners? by H. H. Cunningham, Aug 19 p 44

American Assn. of Textile Manufacturers

Order Surge Looms for Textile Machinery Makers, by K. W. Bennett, July 29 p 26

American Bureau of Shipping

U.S. Shipyards Turn the Corner, by B. D. Wakefield, Sept 16 p 77

American Chain and Cable Co.:

Little Steel: Caught in Retroactivity Bind, Aug 26 p 19

NEP Myth: 'Too Early to Tell', by K. W. Bennett, Aug 26 p 41

American Die Casting Institute

Cracks Develop Before Phase II Even Starts, Oct 14 p 35

American Federation of Labor/CIO

AFL-CIO Seeks Delay of Nixon's Control Powers, Nov 4 p 21

Labor Leaders Will Fight for Phase II Pay Raises, by K. A. Kaufman, Oct 21 p 23

Labor Wins a Voice in Planning NEP, Part II, Sept 2 p 21

Meany Stays in Bold Defiance of NEP, Nov 25 p 19

Mr. Meany, Please Calm Down! by Gene Beaudet, Dec 2 p 5

Who'll Get Chill in Freeze Phase III? by K. A. Kaufman, Sept 16 p 64

American Gas Assn.:

Hydrogen-Powered Car is Smog-Free but Not Trouble-Free, by T. H. Mallin, Oct 14 p 55

American Hoist & Derrick Corp.:

Modular Homes: A Gold Mine or Land Mine? by K. W. Bennett, Nov 11 p 54

American Hospital Supply, Inc.:

Medical Care: Diagnosis Prosperity, by K. W. Bennett and C. J. Suchocki, Sept 2 p 32

American Institute of Biological Sciences

Medical Hardware: Diagnosis Prosperity, by K. W. Bennett and C. J. Suchocki, Sept 2 p 32

American Institute of Chemical Engineers

Chlorination Increases Usable Metals Resources, Sept 16 p 29

Patent Rights: Search for a Better System, Sept 25 p 27

American Institute of Industrial Engineers

What Industrial Engineers Would Like to Do, Nov 4 p 29

American Institute of Public Accountants

Let's Put this One in the Footnotes, by Gene Beaudet, Nov 25 p 5

American Iron and Steel Institute

Has Industry-Campus War Lost its Bang? by J. M. Beattie, Dec 2 p 58

U.S. Trade Whistle Deafens World Steel, by G. J. McManus, Oct 21 p 57

American Management Assn.:

The Flexible Week is Fast Becoming a Permanent Fixture, Nov 11 p 27

American Metal Climax, Inc.:

Are Industry Mergers Key to Global Market? Oct 14 p 23

Continuous Inoculation: The New Grain Refiner, by R. R. Irving, Oct 28 p 44

Mining in New York? It's Way Back, by James Beizer, Oct 7 p 119

Precoated Aluminum Gets Tough Finish, by B. D. Wakefield, Nov 4 p 65

World Looks for Phase II on Trade Policy, by J. D. Baxter, Nov 25 p 55

American Mining Congress

Copper Executives Weren't Told the Whole Story, by James Beizer, Oct 28 p 61

Copper: Measuring High Cost at 50 Cents a Lb., by James Beizer, Oct 21 p 107

Mining Loses Dim Las Vegas Lights, by James Beizer, Oct 21 p 59

American Motors Corp.:

AMC's Warranty: Consumerism is in the Eye of the Beholder, by C. J. Suchocki, Oct 28 p 32

Chrysler, AMC Blot out the Red, by D. N. Williams, July 29 p 18

ESVs Could be ESP of Future Car Design, by D. N. Williams, Sept 30 p 19

1972: A Move-It-or-Lose-It Year for AMC, by D. N. Williams, Aug 12 p 23

Turbine Engine Faces Ultimate Pollution Test—in New York, by D. N. Williams, Dec 25 p 20

American National Standards Institute

Fasteners Start Switch to Metric, by R. R. Irving, Aug 5 p 55

American Optical Corp.:

There's More to Lasers than Light, by J. E. Sandford, Oct 14 p 49

American Petroleum Industry

USSR Oil Leak: A Warning to Alaska's Pipeliners? by I. G. Black, July 8 p 41

American Public Health Assn.:

Technology: It's Great — for Things, Not People, by S. E. Lehman, July 22 p 36

American Smelting & Refining Co.:

Asarco—the Fly in the Lead-Price Ointment, by James Beizer, Dec 16 p 65

How to Beat the Metals Slump-or, 'Think Zinc', by James Beizer, Dec 23 p 51

Lead Price Fluctuation: Much Ado About Nothing, by James Beizer, July 1 p 81

Mining Law Turns into Great Debate, by James Beizer, Sept 30 p 36

Nonferrous Ventures Prepare for Better Days, by James Beizer, Sept 16 p 67

American Society for Body Engineers

ESVs Could be ESP of Future Car Design, by D. N. Williams, Sept 30 p 19

American Society for Metals

Detroit Houses '71 Metal Show, Oct 7 p 75

American Society for Quality Control

Japanese System Sparks Incentive, Aug 19 p 51

American Society for Testing and Materials

Engineering Decisions are for Engineers, July 22 p 49

Measuring the Methods to Measure Air Pollution, Sept 9 p 31

Society Seeks Name Change Without Going to the Altar, July 8 p 28

Standards Urged for Sports Equipment, July 22 p 23

American Society of Body Engineers

Manage Your Output, Not Your Input, by D. N. Williams, Oct 14 p 44

American Society of Mechanical Engineers

Computer Pushes a Broom, Oct 21 p 63

Ecology: After Lacing Industry EPA Cracks its Whip at Cities, by K. W. Bennett, Oct 21 p 62

American Telephone and Telegraph Co.:

Is Labor on its Last Ego Trip? by G. J. McManus, July 22 p 31

Telephone Workers Walk as CWA Snuffs Offer, July 22 p 18

American Welding Society

Plasma Cutting Takes on Steel, by R. R. Irving, Aug 26 p 52

Stainless Welding Shields Itself, R. R. Irving, July 1 p 54

Amforge, Inc.:

EDM-Winging Well Without Aerospace, by K. W. Bennett, Dec 2 p 53

Amforg Trading Assn.:

Kama River Caper: Scene Three, by R. A. Wilson and K. A. Kaufman, Aug 19 p 32

Anaconda American Brass Co.:

Prices: What You Want isn't Always What You Get, by K. A. Kaufman and G. J. McManus, Dec 2 p 60

Anaconda Co.:

Allende Claims He Got a Pig in the Copper Poke, by James Beizer, Nov 11 p 50

And Don't Bet on Payoffs in Chile Either..., by James Beizer, Oct 21 p 59

Chile, Something for Nothing? by James Beizer, Oct 7 p 50

How to Beat the Metals Slump-or, 'Think Zinc' by James Beizer, Dec 23 p 51

New Who's Who Follows Anaconda's Corporate Blood Bath, by James Beizer, Nov 18 p 89

R&D Layoffs Cut Into Industry Muscle, by G. J. McManus, Oct 28 p 27

Anco Metal Improvement Co.:

'Fuzzy' Debuts the Inaccessible, by B. D. Wakefield, Aug 12 p 78

Anderson Power Products

Big Electric Auto Lights Up Builders, by K. W. Bennett, Nov 4 p 51

Anocut Engineering Co.:

Winging Well Without Aerospace, by K. W. Bennett, Dec 2 p 53

Anti-Friction Bearing Manufacturers Assn.:

Competitive Race Proves Too Much for Federal's Bearings, by D. N. Williams, Nov 4 p 53

Anvan Industries, Inc.:

Factory Housing: High Rising Sales, by K. W. Bennett, Aug 5 p 42

Instant Motels: Only Gideon's Bible isn't Pre-Fabricated, by K. W. Bennett, Dec 2 p 57

Appliances

Boob Tube Bis Boffos, by K. W. Bennett, July 8 p 39

Nixon Defrosts U.S. Compact Appliances, by K. W. Bennett, Sept 9 p 53

Slit a Foil; Make a Heater; Build a Plant, by K. W. Bennett, Nov 25 p 61

Tomorrow's Growth Market, Refrigerators? by K. W. Bennett, Oct 14 p 39

Applied Kinetics, Inc.:

Computer Takes Heat Off Melt Shop, by B. D. Wakefield, Sept 23 p 60

Armco Steel Corp.:

'Argon-Oxygen' Brings New Life to Stainless, by R. R. Irving, Nov 11 p 61

Business Decides to Slug it Out with Dissenters, Dec 2 p 29

Fed Wage Control: Management's Wary, by G. J. McManus, July 15 p 46

Gas Pipeline Challenges the Elements, by B. D. Wakefield, Nov 25 p 71

Needed: The Right Alloys to Tame Automobile Exhaust Emissions, by W. G. Patton, Sept 30 p 44

R&D Layoffs Cut Into Industry Muscle, by G. J. McManus, Oct 28 p 27

Steel Begins to Lay Old Warriors to Rest, by G. J. McManus, Dec 16 p 64

Steel Sandwich Resists Pitting Corrosion, Nov 4 p 31

Arco Div.:

Assembly Machines Push Up Stream, by R. A. Wilson, Aug 12 p 59

Associated Industries of Cleveland

Are Front Offices Union-Growth Targets? Sept 30 p 15

Assn. for Computing Machinery

Are You Too Small to be Good? by Gene Beaudet, Sept 23 p 5

Assn. of Consulting Management Engineers

Recovery Revives Executive Hopscotch, by R. A. Wilson, Sept 16 p 61

Will Consultants be Social Ombudsmen? Sept 2 p 24

Assn. of Data Process Service Organization, Inc.:

A Bird? A Planet? No, Supercomputer! by K. W. Bennett, July 15 p 44

Assn. of Iron and Steel Engineers

Chicago Plays Host to 1971 AISE Meeting, Sept 9 p 74

Mill Equipment: Color it Black with Gray Streaks, by G. J. McManus, Oct 7 p 53

Australia

Investing in Australia? Don't Be an Ugly American, by James Beizer, Sept 2 p 61
Nonferrous Ventures Prepare for Better Days, by James Beizer, Sept 16 p 67

Australian Iron and Steel Ltd.

Infra-Red Checks Downtime, Sept 16 p 82

Australian Mining and Smelting, Ltd.

Nonferrous Ventures Prepare for Better Days, by James Beizer, Sept 16 p 67

Autoclave Engineers, Inc.

Carbide Makers Get Hip with HIP, by R. A. Wilson, Sept 9 p 51

Automated Building Components, Inc.

Modular Homes: A Gold Mine or Land Mine? by K. W. Bennett, Nov 11 p 54

Automation

Best Seller '72: 'Run, Robot, Run', by K. W. Bennett, Dec 23 p 26
Crystal Gazing: Manufacturing's Future, by D. N. Williams and W. G. Patton, July 1 p 44
Ford Adds Foreign Free-Form Scanner, by D. N. Williams, Sept 23 p 43
Robot Movie Stars at Ford as Use Increases, by D. N. Williams, Sept 30 p 38

Automobiles

AMC's Warranty: Consumerism is in the Eye of the Beholder, by C. J. Suchocki, Oct 28 p 32
'An Oil Gage is an Oil Gage is an Oil Gage', by D. N. Williams, Aug 26 p 23
Auto Headache No. '72: Emissions and Imports, by D. N. Williams, Sept 16 p 23
Automakers Become Doubting Thomases, Nov 11 p 53
Automakers Like "Glaing", by T. C. DuMont, Aug 19 p 48
Auto Pollution: If You Smoke, Don't Drive, by D. N. Williams, Aug 19 p 19
Auto Prophecy: The Universal Engine, by D. N. Williams, Sept 2 p 39
Beetlemakers Bugged on Profit Decline Making New Minicar? Dec 2 p 27
Beetles Will Not be Hibernating Despite 'Freeze', by D. N. Williams, Oct 21 p 61
Big Electric Auto Lights Up Builders, by K. W. Bennett, Nov 4 p 51
'Big Two' Automakers: A Hale and Hearty Season, by D. N. Williams, Aug 5 p 20
Can Detroit Weather Potomac Storm? by D. N. Williams, July 29 p 25
Chrysler, AMC Blot out the Red, by D. N. Williams, July 29 p 18
A 'Crash' Program Under Way for New Bumpers, by W. G. Patton, Nov 4 p 60
Crystal Gazing: Manufacturing's Future, by D. N. Williams and W. G. Patton, July 1 p 44
Detroit's New 'Mixtrix' is Not All Feet, by D. N. Williams, Oct 7 p 25
Different Strokes for Different Folks, by D. N. Williams, Aug 12 p 62
Dummies Died—But Some Only Slightly—In GM Safety Car, by D. N. Williams, Nov 4 p 25
Electro-Controls Are Well, Come, Are Coming..., by D. N. Williams, Oct 21 p 25
Electronic Ignition: \$35 and a Bag of Strange Parts, by D. N. Williams, Nov 11 p 23
ESVs Could be ESP of Future Car Design, by D. N. Williams, Sept 30 p 19

GM is Out in Front with Bumpers that Bump, by D. N. Williams, Sept 2 p 25

General Motors: In the Midst of Metamorphosis, by D. N. Williams, Sept 23 p 25

Henry Ford Looks into Auto's Crystal Ball, by D. N. Williams, Dec 16 p 25

Hybrid Line Cuts Trapezoids, by R. D. Wakefield, Oct 28 p 47

Hydrogen-Powered Car is Smog-Free but Not Trouble-Free, by T. H. Malim, Oct 14 p 55

Is it True What They Say About Chevysuz? by D. N. Williams, Dec 2 p 25

'Messing Around with Design' Shifts Gears at Ford, by D. N. Williams, Nov 18 p 25

Needed: The Right Alloys to Tame Automobile Exhaust Emissions, by W. G. Patton, Sept 30 p 44

1972: A Move-It-or-Lose-It Year for AMC, by D. N. Williams, Aug 12 p 23

Pollution from the Antitrusters, by Gene Beaudet, Oct 7 p 5

Robot Movie Stars at Ford as Use Increases, by D. N. Williams, Sept 30 p 38

Safety Air Bag Inflated, Deflated in Three-Way Clash, by D. N. Williams, Dec 23 p 31

Safety Air Rules Affect Auto Materials Use, by D. N. Williams, Oct 28 p 19

Sales Wait for Post-NEP Vertigo to Subside, by D. N. Williams, Sept 2 p 23

Some Plants Never Fade Away, by J. J. Ohrzut, July 8 p 50

Steel Summary: Everyone's Watching the New Cars, Sept 16 p 119

Turbine Engine Faces Ultimate Pollution Test—in New York, by D. N. Williams, Dec 23 p 20

U.S.-Canada Automaker Pact May Finally Get Chancel, by Robert Jamieson and D. N. Williams, Dec 9 p 44

Who's Got the Best Bumpers that Bump? by D. N. Williams, July 8 p 23

Volkswagens Hurt in Orders Brake, Metalworkers Strike, Dec 16 p 27

Automotive Industry—weekly Reports of Inside and Outside influences (See Also D. N. Williams)

Automotive Industry

Automotive Suppliers Walk Shaky Tightrope, by D. N. Williams, July 22 p 20
Can Detroit Weather Potomac Storm? by D. N. Williams, July 29 p 25
Detroit's New 'Mixtrix' is Not All Feet, by D. N. Williams, Oct 7 p 25
Economic Computers Don't Agree on Freeze's Effects, by D. N. Williams and P. J. Cathey, Sept 16 p 65
Is Bendix Laughing All the Way to Technology Bank? by D. N. Williams, Dec 9 p 23
Is Monopoly GM's Favorite Game? by D. N. Williams, July 1 p 23
Safety + Emission Rules = Orders for Suppliers? by D. N. Williams, July 15 p 25
Sales Wait for Post-NEP Vertigo to Subside, by D. N. Williams, Sept 2 p 23
The Two Faces of Phase II Pricing, by G. J. McManus, Dec 9 p 39
U.S.-Canada Automaker Pact May Finally Get Chancel, by Robert Jamieson and D. N. Williams, Dec 9 p 44
You Can't Have Your Political Cake and Tax Credit—Maybe, by K. A. Kaufman, Dec 2 p 23

Autoplace, Inc.

Best Seller '72: 'Run, Robot, Run', by K. W. Bennett, Dec 23 p 26

Avco Bay State Abrasives Div.

Farm Machines: A New Year Brightens, by K. W. Bennett, Sept 16 p 63
Industrial Diamond Future Begins to Sparkle, by K. W. Bennett, Sept 23 p 46

Plasma Coatings Improved in Hardness, Density, by T. H. Malim, Sept 23 p 62

Avco Corp.

There's More to Lasers than Light, by J. E. Sandford, Oct 14 p 49

B

BFS Psychological Associates, Inc.

Losing Management Touch? Blame the Megrimms, by S. H. Hockenberry, Nov 18 p 49

Barber-Colman Co.

Order Surge Looms for Textile Machinery Makers, by K. W. Bennett, July 29 p 26
Will Spring Tool Order Shower Last? by R. A. Wilson, July 29 p 27

Barber-Greene Co.

Construction Rigs Bulling for '72 Power Upthrust, by K. W. Bennett, Nov 18 p 46

Bars & Shapes

GM Casts In-Plant Scrap into In-Plant Steel, by W. G. Patton, Dec 9 p 53
Steelmaking Process Converts Machine Turnings into Bars, Dec 2 p 31

Bartoli-Brady Enterprises, Inc.

Modular Homes: A Gold Mine or Land Mine? by K. W. Bennett, Nov 11 p 54

Battelle Memorial Institute

'Major Breakthrough in Coating', Sept 23 p 29
Powder Metallurgy: A Sleeping Giant, Oct 7 p 63

Battenfeld Corp. of America

It's a Plastics World for Capital Spending, by K. W. Bennett, Nov 11 p 49

Battronic Corp.

Big Electric Auto Buy Lights Up Builders, by K. W. Bennett, Nov 4 p 51

Bauxite

Alumina Residue Provides Useful Products, Dec 23 p 24
Latin Deposits: A Banker's Game, by James Beizer, Aug 19 p 35
The UG Process May Ease Problems Involving Bauxite, Oct 14 p 66

Bearings

Air Bearings Make Machining a Breeze, by W. G. Patton, Aug 19 p 50
Can a New Bearing Alloy Replace 52100 Steel? Aug 26 p 59
Competitive Race Proves too Much for Federal's Bearings, by D. N. Williams, Nov 4 p 53
Lower Cost Alloy for Bearings, July 29 p 19

Behring Corp.

Modular Homes: Sizzle Fixles, by K. W. Bennett, Dec 9 p 44

Belden Corp.

Copper is Metals' Newest Pauper, by James Beizer, Dec 23 p 29

Bell Aerospace Div.

U.S. Shipyards Turn the Corner, by B. D. Wakefield, Sept 16 p 77

Bell and Associates

Industry's Quiet Rush to Silence, by J. E. Sandford, Dec 16 p 73

Bell & Howell Co.

Boob Tube Biz Boffos, by K. W. Bennett, July 8 p 39

Bell Telephone Laboratories

There's More to Lasers than Light, by J. E. Sandford, Oct 14 p 49

Belmus Co., Inc.

Stainless Welding Shields Itself, by R. R. Irving, July 1 p 54

Beltone Electronics Corp.

Medical Hardware: Diagnosis Prosperity, by K. W. Bennett and C. J. Suchocki, Sept 2 p 32

Bendix Corp.

Assembly Machines Push Up Stream, by R. A. Wilson, Aug 12 p 59
Is Bendix Laughing All the Way to Technology Bank? by D. N. Williams, Dec 9 p 23
Mass Transit Mess: There's a Market Here Somewhere, by D. N. Williams, Nov 25 p 28
Safety + Emission Rules = Orders for Suppliers? by D. N. Williams, July 15 p 25

Beryllium

Beryllium Not a Metal, July 15 p 29

Bethlehem Steel Corp.

Bethlehem Cited for Unfair Seniority, July 1 p 19
Computer Pushes a Broom, Oct 21 p 63
Ecology: After Lacing Industry EPA Cracks its Whip at Cities, by K. W. Bennett, Oct 21 p 62
Gas Pipeline Challenges the Elements, by B. D. Wakefield, Nov 25 p 71
Lackawanna: To be or Not to Be? by Scott Hayden, Dec 2 p 56
Mill Equipment: Color it Black with Gray Streaks, by G. J. McManus, Oct 7 p 53
Nixon's Game Plan: From Slow to Stono, by K. A. Kaufman, Aug 19 p 35
Recycling Could Unset Scrap Industry, by G. J. McManus, July 1 p 39
That 'Blue Sky' on Steelmaking's Horizon, by G. J. McManus, Dec 2 p 65
U.S. Shipyards Turn the Corner, by R. D. Wakefield, Sept 16 p 77
Was Steel's Struggle in the Wave-Price Web Turning Point Toward New Economy? by G. J. McManus, Sept 9 p 55

Bituminous Coal Operators Assn.

King Coal to Nixon: Sorry, Old Soul, Oct 7 p 47
Nervous Nixon Watches Mine, Maritime Talks, Sept 30 p 15

Black & Decker Mfg. Co.

Profit Plans: They Gotta Have Heart, by J. D. Baxter, Sept 16 p 71

Black Clawson Co.

'Clean Town' Cashes in on Daily Dirt, by R. A. Wilson, Sept 2 p 38

Blaw-Knox Co.

NEP Myth: 'Too Early to Tell', by K. W. Bennett, Aug 26 p 41

A Rolling Mill Gathers No Money in a Deep Freeze, by G. J. McManus, Nov 18 p 45

Blunt Co.

Recovery Revives Executive Hopscotch, by R. A. Wilson, Sept 16 p 61

Boari Research Laboratory

Steelmaking Process Converts Machine Turnings into Bars, Dec 2 p 31

Bodine Corp.

Assembly Machines Push Up Stream, by R. A. Wilson, Aug 12 p 59

Boeing Co.:

A Bird? A Plane? No, Supercomputer!, by K. W. Bennett, July 15 p 44
 Japan Holding Back on Steel Exports; Declines Jet Deal, Dec 23 p 22
 Japanese Seeking Development Aid for 'United' Aircraft, Nov 4 p 27
 New Riveter Drives Rivets in Split Second, Nov 18 p 62
 Transit Poker Draws a Card, by S. H. Hockenberry, Sept 23 p 41

Boise Cascade Corp.:

If You Want to Know What's Going On—Rap with Employees, Oct 28 p 20
 What Survey Showed and Follow-Up, Oct 28 p 20

Bomco, Inc.:

'Dumb' Company Devises Quartz-to-Metal Seals, Sept 30 p 23
 Keeping Track of Hours Not Too Tough, Sept 30 p 22
 Why Not a Four/Five Day Workweek? Sept 30 p 22

Boston Digital Corp.:

Flame Cutting Warms Up to NC Tape, by J. E. Sanford, Aug 5 p 44

Bristol Brass Corp.:

After the Walts: Will Copper Price Sit it Out? by James Beizer, July 29 p 45

British Iron & Steel Research Assn.:

That 'Blue Sky' on Steelmaking's Horizon, by G. J. McManus, Dec 2 p 65

British Steel Corp.:

Coating Graphite Electrodes Cuts Costs, Aug 19 p 21
 Japanese Steel Producer Wars with BSC Over Steel Orders, Dec 16 p 27
 That 'Blue Sky' on Steelmaking's Horizon, by G. J. McManus, Dec 2 p 65

Brotherhood of Railway Signalmen

Nervous Nixon Watches Mine, Maritime Talks, Sept 30 p 15

Brown & Sharpe Mfg. Co.:

Europe, Imports Appeal Starts to Fade, Aug 26 p 46
 MT Mission to Moscow: Great Success, by K. W. Bennett, July 1 p 35

Browning-Ferris Industries, Inc.:

Ecology: After Lacing Industry EPA Cracks Its Whip at Cities, by K. W. Bennett, Oct 21 p 62

Buchanan Steel Products Div.:

Forgers Get Hot for Furnaces, by K. W. Bennett, Oct 7 p 52

Bucyrus-Erie Co.:

Europe, Imports Appeal Starts to Fade, Aug 26 p 46

Budd Automotive Co. of Canada, Ltd.:

Some Plants Never Fade Away, by J. J. Obrzut, July 8 p 50

Building Construction

Factory Housing: High Rising Sales, by K. W. Bennett, Aug 5 p 42
 Instant Motels: Only Gideon's Bible isn't Pre-Fabricated, by K. W. Bennett, Dec 2 p 57
 Modular Homes: A Gold Mine or Land Mine? by K. W. Bennett, Nov 11 p 54
 Modular Homes: Sizzle Fizzles, by K. W. Bennett, Dec 9 p 44

Bumpers

A 'Crash' Program Under Way for New Bumpers, by W. G. Patton, Nov 4 p 60

GM is Out in Front with Bumpers that Bump, by D. N. Williams, Sept 9 p 25
 Who's Got the Best Bumpers that Bump? by D. N. Williams, July 8 p 23

Burch Controls, Inc.:

Best Seller '72: 'Run, Robot, Run', by K. W. Bennett, Dec 23 p 26

Bureau of Labor Statistics

The "Discouraged"—A Growing Fraternity Sept 2 p 21

Burgmaster Corp.:

Giant Machines Change the Game, by J. E. Sanford, Aug 12 p 71

Burlington Engineering Div.:

Order Surge Looms for Textile Machinery Makers, by K. W. Bennett, July 29 p 26

Burns International Security Services, Inc.:

Are Worker's Rights Only Part-Time? by S. H. Hockenberry, July 15 p 60

Burroughs Corp.:

A Bird? A Plane? No, Supercomputer!, by K. W. Bennett, July 15 p 44

Business/Finance Newsfront, Weekly Editorials and Forecasts (See Also Gene Beaudet)**E. A. Butler Associates**

Recovery Revives Executive Hopscotch, by R. A. Wilson, Sept 16 p 61

C**CRC-Cross International, Inc.:**

Gas Pipeline Challenges the Elements, by B. D. Wakefield, Nov 25 p 71

CRS Design Associates, Inc.:

New Ideas to Solve Some New Problems, Nov 18 p 29

Cabot Corp.:

'Argon-Oxygen' Brings New Life to Stainless, by R. R. Irving, Nov 11 p 61
 Powder Metallurgy: A Sleeping Giant, Oct 7 p 63

California Society of Professional Engineers

Patent Rights: Search for a Better System, Sept 23 p 27

Cameron Iron Works, Inc.:

Aerospace Forgers Find Commercial Road Narrow, by R. A. Wilson, July 8 p 36

Canada

Alcan's Arvida Rolling Mill: The Envy of the Industry, by James Beizer, Sept 23 p 81
 Gas Pipeline Challenges the Elements, by B. D. Wakefield, Nov 25 p 71
 Nonferrous Ventures Prepare for Better Days, by James Beizer, Sept 16 p 67
 Some Plants Never Fade Away, by J. J. Obrzut, July 8 p 50
 U.S.-Canada Automaker Pact May Finally Get Changed, by Robert Jamieson and D. N. Williams, Dec 9 p 44
 The World Takes Inventory of its Aluminum Problems, by James Beizer, Nov 25 p 109

Canadian National Energy Board

Gas Pipeline Challenges the Elements, by B. D. Wakefield, Nov 25 p 71

Canadian Phoenix Steel and Pipe, Ltd.:

Gas Pipeline Challenges the Elements, by B. D. Wakefield, Nov 25 p 71

Cans

More Metals Get Chromium Coats, July 15 p 61

William Caples

What Pay Board Will—and Won't—Do, by K. A. Kaufman, Dec 2 p 62

Carbides

Carbide Fabric Dresses Up Parts, by N. B. Schwartz, July 22 p 50
 Carbide Makers Get Hip with HIP, by R. A. Wilson, Sept 9 p 61

Carborundum Co.:

How Fast Can Abrasive Machining Go? by R. A. Wilson, July 22 p 34

Carlton Machine Tool Co.:

MT Mission to Moscow: Great Success, by K. W. Bennett, July 1 p 35

Carnegie-Mellon University

Materials: Stress Use, Not More R&D, by G. J. McManus, Nov 25 p 62

Carpenter Technology Corp.:

'Argon-Oxygen' Brings New Life to Stainless, by R. R. Irving, Nov 11 p 61
 Industry: Bold Tip-Toe Through Maze II, Nov 18 p 43
 Tool Steels Take the ESR Road, by G. J. McManus, Sept 23 p 55

Carolina Steel Corp.:

Order Surge Looms for Textile Machinery Makers, by K. W. Bennett, July 29 p 26

J. I. Case Co.:

Construction Rigs Bulling for '72 Power Upthrust, by K. W. Bennett, Nov 18 p 46

Case Western Reserve University

Innovation: Who You Ask Decides What You'll Get, by D. N. Williams, Oct 7 p 49

Casting, Continuous

GM Casts In-Plant Steel, by W. G. Patton, Dec 9 p 53
 Mill Equipment: Color it Black with Gray Streaks, by G. J. McManus, Oct 7 p 53

Castings

Foundries Face Up to the Crisis, by W. G. Patton, July 29 p 35
 GE Powers Ford's New Casting Center, Oct 28 p 51
 GM Molding a Giant Step for Casting? by D. N. Williams, Dec 23 p 30
 Polyfoam Patterns Casting Profits, Oct 28 p 50
 Shipbuilder Becomes Casting Producer, Nov 11 p 29

Castings, Die

Die Casting Gets a New Alloy, Sept 9 p 69
 Pore-Free Die Casting Goes Commercial, Aug 12 p 29

Caterpillar Tractor Co.:

About '72—Optimism is Busting Out, by K. W. Bennett, Dec 16 p 59
 Investment Abroad Benefits U.S. Says Executive, Nov 25 p 25
 Time Running Out on Tooling White Sale? by R. A. Wilson, Oct 21 p 60

Central Intelligence Agency

Kama River Caper: Scene Three, by R. A. Wilson and K. A. Kaufman, Aug 19 p 32

Ceramics

Ceramic Cocoon Blocks Oxidation, by B. D. Wakefield, July 8 p 52
 Ceramics Lose Dish-Fragile Image, Dec 16 p 80

Cerre Corp.:

And Don't Bet on Payoffs in Chile Either . . . by James Beizer, Oct 21 p 59

Chambersburg Engineering Co.:

Forging Equipment Teamwork Strikes Competitive Blow, by J. J. Obrzut, Oct 21 p 76

Chambre de la Siderurgie

U.S. Trade Whistle Deafens World Steel, by G. J. McManus, Oct 21 p 57

Chandler Evans Control Systems Div.:

Heat-Treat Rules: Time for Change? by T. H. Malim, Aug 26 p 57

Chematron Corp.:

Plasma Cutting Taken on Steel, by R. R. Irving, Aug 26 p 52

Cheston Co.:

Forgers Get Hot for Furnaces, by K. W. Bennett, Oct 7 p 52

Chile

Allende Claims He Got a Pig in the Copper Poke, by James Beizer, Nov 11 p 50
 And Don't Bet on Payoffs in Chile Either . . . by James Beizer, Oct 21 p 59
 Chile Copper Crisis Gets Warmer Again, by James Beizer, Dec 9 p 79
 Chile, Something for Nothing? by James Beizer, Oct 7 p 50
 Copper is Metals' Newest Pauper, by James Beizer, Dec 23 p 29
 Latin Deposits: A Banker's Game, by James Beizer, Aug 19 p 38

Chilton Co.:

Chilton President McKenna on Postal Services Council, Oct 23 p 18

China

Only a Domestic Upheaval Bars China's Trade Growth, Nov 11 p 25

Chrome Ore

Chrome and Politics Provide Ingredients for Senate Stinger, by K. A. Kaufman, Oct 14 p 19
 Politics Kicks Around Chrome, by J. M. Beattie, Oct 28 p 33
 What's in Russia's Bag of Exports? by J. M. Beattie, Dec 9 p 42

Chromium

Needed: The Right Alloys to Tame Automobile Exhaust Emissions, by W. G. Patton, Sept 30 p 44

Chrysler Corp.:

'An Oil Gage is an Oil Gage' is an Oil Gage, by D. N. Williams, Aug 26 p 23
 Automakers Become Doubting Thomases, Nov 11 p 53
 Chrysler, AMC Blot out the Red, by D. N. Williams, July 29 p 13
 Different Strokes for Different Folks, by D. N. Williams, Aug 12 p 62
 Electronic Ignition: \$35 and a Bag of Strange Parts, by D. N. Williams, Nov 11 p 23
 Industry Warms Up to Supercold, by R. A. Wilson, Aug 26 p 55
 Manage Your Output, Not Your Input, by D. N. Williams, Oct 14 p 44
 Sales Wait for Post-NEP Vertigo to Subside, by D. N. Williams, Sept 2 p 23
 Short Workweek Has Short Life at Chrysler, Dec 23 p 18

Cincinnati Inc.:

Powder Metallurgy: A Sleeping Giant, Oct 7 p 63
Processing Coil—You've Got to Have a System, by R. A. Wilson, July 29 p 24

Cincinnati Milacron

Cutting Fluid Preservation Beats Dumping, by J. J. Obrzut, Dec 23 p 37
Giant Machines Change the Game, by J. E. Sandford, Aug 12 p 71
How Fast Can Abrasive Machining Go? by R. A. Wilson, July 22 p 34
Industrial Diamond Future Begins to Sparkle, by K. W. Bennett, Sept 23 p 46
MT Mission to Moscow: Great Success, by K. W. Bennett, July 1 p 35
Must Small Plants Go Down the Drain? by J. J. Obrzut, July 1 p 49
Overseas Builders Press U.S. Lead in NC Technology, by J. E. Sandford, Nov 25 p 60
Phasedom Strikes Again—Now it's Systems, by R. A. Wilson, Dec 16 p 62

Clark Equipment Co.:

Modular Homes: A Gold Mine or Land Mine? by K. W. Bennett, Nov 11 p 54
Plasma Cutting Takes on Steel, by R. R. Irving, Aug 26 p 62

Cleveland Cliffs Iron Co.:

U.S. Iron Ore's Place in the Sun Shrinks and Pales, Oct 14 p 41

Cleveland State University

You've Come a Long Way, Baby—In Some Ways! Aug 12 p 27

Climax Molybdenum Co.:

Gas Pipeline Challenges the Elements, by B. D. Wakefield, Nov 25 p 71

Coal

Coal: EEC May Buy a Double Scoop Next Time, July 8 p 25
Coal Strike Kindles Smoldering Industry Ire, Oct 28 p 31
Coal User's Dirge: Boyle Fiddles, but What's Left to Burn? by G. J. McManus, Nov 11 p 52
Why Old King Coal Isn't Very Merry, by K. A. Kaufman, Dec 9 p 41

Coatings

Carbide Fabric Dresses Up Parts, by N. B. Schwartz, July 22 p 50
Ceramic Cocoon Blocks Metal Oxidation, by B. D. Wakefield, July 8 p 52
Coating Graphite Electrodes Cuts Costs, Aug 19 p 21

"Major Breakthrough in Coating Technology", Sept 23 p 29
Make Room for Powder Coatings, by J. J. Obrzut, Sept 2 p 48
More Metal Cans Get Chromium Coats, July 15 p 61
Patterns Find Coating in Urethane, Sept 9 p 70
Plasma Coatings Improved in Hardness, Density, by T. H. Malim, Sept 23 p 62
Precoated Aluminum Gets Tough Finish, by B. D. Wakefield, Nov 4 p 65
Pretreating Speeds Plating of Plastics, Sept 30 p 51
System Holds Line to Tight Specs, by T. H. Malim, Oct 7 p 69
White Rust Controlled on Galvanized Steel, Nov 11 p 66

Coherent Radiation

There's More to Lasers than Light, by J. E. Sandford, Oct 14 p 49

Coils

Mill Managers Work in 'Real Time', Oct 7 p 68
Processing Coil - You've Got to Have a System, by R. A. Wilson, July 29 p 24
A Small Service Center's Challenge, by A. M. Greene, Aug 5 p 57

Coke

Coal Strike Kindles Smoldering Industry Ire, Oct 28 p 31

Coleman Co.:

Nixon Defrosts New Compact Appliances, by K. W. Bennett, Sept 9 p 53

Colorado Central Mines, Inc.:

The UG Process May Ease Problems Involving Bauxite, Oct 14 p 56

Colorado Fuel & Iron Co.:

Little Steel Moves Into the Big Time, by K. W. Bennett, Sept 2 p 37

Colt Industries, Inc.:

Automotive Suppliers Walk Shaky Tightrope, by D. N. Williams, July 22 p 20
Europe, Imports Appeal Starts to Fade, Aug 26 p 46
Heat-Treat Rules: Time for Change? by T. H. Malim, Aug 26 p 57
Powder Metallurgy: A Sleeping Giant, Oct 7 p 63

Columbia University

Where Have All the Promises Gone? by S. H. Hockenberry, July 8 p 42

Combustion Engineering, Inc.:

Charpy Learns a Lot of New Tricks, by T. H. Malim, Nov 25 p 76

Combustion Equipment

Product Liability: Let the Maker Beware, Nov 11 p 67

Communication Workers of America

Telephone Workers Walk as CWA Snuffs Offer, July 22 p 18

Compo Industries, Inc.:

Urethanes Foam into Injection Molding, by T. H. Malim, Dec 23 p 40

Component Building Systems, Inc.:

Factory Housing: High Rising Sales, by K. W. Bennett, Aug 5 p 42

Composite Materials

Carbide Fabric Dresses Up Parts, by N. B. Schwartz, July 22 p 50
Felt Goes into Outer Space, by T. H. Malim, July 1 p 56
Will Composites Make it in Time? Oct 14 p 27

Composite Sciences, Inc.:

Carbide Fabric Dresses Up Parts, by N. B. Schwartz, July 22 p 50

Compton & Knowles Corp.:

Order Surge Looms for Textile Machinery Makers, by K. W. Bennett, July 29 p 26

Computers

Are You Too Small to be Good? by Gene Beaudet, Sept 23 p 5
Big, Big Computer for Inventory Woes, by K. W. Bennett, Oct 7 p 51
A Bird? A Plane? No, Supercomputer!, by K. W. Bennett, July 15 p 44
Closed-Loop System Sets the Trap for Shortage in Critical Parts, by B. D. Wakefield, Oct 21 p 77
Computer Guides NC Punching, by T. H. Malim, Sept 23 p 58
Computer Pushes a Broom, Oct 21 p 63
Computer Takes Heat Off Melt Shop, by B. D. Wakefield, Sept 23 p 60
Hope for Industry - by the Numbers, by K. W. Bennett, July 22 p 37
Japan and U.S. Pool Computer Programs, Sept 2 p 25

Medical Hardware: Diagnosis Prosperity, by K. W. Bennett and C. J. Suchocki, Sept 2 p 32
Mill Managers Work in 'Real Time', Oct 7 p 68
Mini Computer - Makers Unveil Maxi System, Sept 23 p 61
Optical Reader Breaks Computer Logjam, July 15 p 60
A Small Service Center's Challenge, by A. M. Greene, Aug 5 p 57
Small-Shop NC via Teletypewriter, July 1 p 52
Who's in Charge When Computers Meet? by K. W. Bennett, Aug 12 p 60

Conair, Inc.:

It's a Plastics World for Capital Spending, by K. W. Bennett, Nov 11 p 69

Concast, Inc.:

Mill Equipment: Color it Black with Gray Streaks, G. J. McManus, Oct 7 p 53

Consolidated Aluminum Co.:

Aluminum Industry Easing Out of Doldrums, by James Beizer, Nov 4 p 52
Aluminum Prices: Sick Patient Deals in Black Humor, by James Beizer, Sept 30 p 55
Aluminum Refuses Realistic Pricing After Big Cut, by James Beizer, Oct 14 p 65

Construction Equipment

Construction Rigs Bulling for '72 Power Uphrust, by K. W. Bennett, Nov 18 p 46
Drop-out Manager Drop Back in with a Crusher, Aug 19 p 37

Construction Industry

Building Trades Lay Foundation for Pay Board, by K. A. Kaufman, Nov 4 p 23
Instant Motels: Only Gideon's Bible isn't Pre-Fabricated, by K. W. Bennett, Dec 2 p 57

Consumerism

AMC's Warranty: Consumerism is in the Eye of the Beholder, by C. J. Suchocki, Oct 28 p 32
Corporate Secrecy: Nader Finds Himself Some New Raiders, by K. A. Kaufman, Nov 18 p 23
Hazardous Products: Who Watches the Watchdog? by K. A. Kaufman, July 29 p 17

Continental Steel Corp.:

Little Steel Moves Into the Big Time, by K. W. Bennett, Sept 2 p 37
Strike Snags Plague Little Steel, Oct 7 p 21

Contour Products, Inc.:

Optical Gaging Speeds Design Time on New Products, by T. H. Malim, Dec 9 p 59

Control Data Corp.:

A Bird? A Plane? No, Supercomputer!, by K. W. Bennett, July 15 p 44

Convair Aerospace Div.:

Will Composites Make it in Time? Oct 14 p 27

Conzinc Riotinto of Australia Ltd.:

Nonferrous Ventures Prepare for Better Days, by James Beizer, Sept 15 p 67
That 'Blue Sky' on Steelmaking's Horizon, by G. J. McManus, Dec 2 p 65

Copper

After the Warts: Will Copper Price Sit it Out? by James Beizer, July 29 p 45
Allende Claims He Got a Pig in the Copper Poke, by James Beizer, Nov 11 p 50
And Don't Bet on Payoffs in Chile Either . . . by James Beizer, Oct 21 p 59

"Bargaining Fat" in Puerto Rico? by James Beizer, Oct 21 p 105
Chile Copper Crisis Gets Warmer Again, by James Beizer, Dec 9 p 79
Chile, Something for Nothing? by James Beizer, Oct 7 p 50
Copper Executives Weren't Told the Whole Story, by James Beizer, Oct 28 p 61
Copper is Metals' Newest Pauper, by James Beizer, Dec 23 p 29
Copper: Measuring High Coat at 50 Cents a Lb., by James Beizer, Oct 21 p 107
Copper: Not All the Horses are Home Yet, Aug 12 p 19
Copper Pricing: An End to Tail Wagging the Dog? by James Beizer, Aug 19 p 61
Copper Strike Has Silver Lining, by James Beizer, July 8 p 40
Copper Strike Settlement: Might be a Long, Long Wait, by James Beizer, July 15 p 77
Electronic Crystal Ball Predicts Copper Prices, by James Beizer, July 8 p 77
Japanese Set Up to Score Major Copper Goal, Nov 18 p 47
Let George Do It - Copper Industry's Answer to Pricing, by James Beizer, Dec 2 p 83
New Who's Who Follows Anaconda's Corporate Bloodbath, by James Beizer, Nov 18 p 89
Prain Looks at Copper's Future: Expensive, by James Beizer, Nov 4 p 85

Copper Institute

After the Warts: Will Copper Price Sit it Out? by James Beizer, July 29 p 45

Copperweld Steel Co.:

Steel Summary: A Hard Line on Import Quota Talks, Sept 23 p 79

Coromant Div.:

Carbide Makers Get Hip with HIP, by R. A. Wilson, Sept 9 p 51

Corporate Social Action, Inc.:

New Ideas to Solve Some New Problems, Nov 18 p 29

Corrosion

Steel Sandwich Resists Pitting Corrosion, Nov 4 p 31
White Rust Controlled on Galvanized Steel, Nov 11 p 66

Cost of Living Council

Cracks Develop Before Phase II Even Starts, Oct 14 p 35
Labor Leaders Will Fight for Phase II Pay Raises, by K. A. Kaufman, Oct 21 p 23
NEP: Is More Tax Relief in the Cards? by K. A. Kaufman, Sept 2 p 36

Council of Economic Advisors

A Nice, Slow, Soggy Recovery, by K. A. Kaufman, July 15 p 43
And Now Introducing (Ta-Ta-Tah) Phase III, by J. D. Baxter, Oct 14 p 35

Council on Environmental Quality

Water Pollution: How Much is Public Willing to Pay? by K. A. Kaufman, Dec 16 p 23

Cranfield Institute of Technology

Who's in Charge When Computers Meet? by K. W. Bennett, Aug 12 p 60

Cross Co.:

Assembly Machines Push Up Stream, by R. A. Wilson, Aug 12 p 59
Europe, Imports Appeal Starts to Fade, Aug 26 p 46
NEP Myth: 'Too Early to Tell', by K. W. Bennett, Aug 26 p 41

Crucible Materials Research Center

Powder Metallurgy: A Sleeping Giant, Oct 7 p 63

Crucible Specialty Metals Div.:

Powder Metallurgy: A Sleeping Giant, Oct 7 p 63

Cryogenics

Industry Warms Up to Supercold, by R. A. Wilson, Aug 26 p 55

Cummins Engine Co.:

Cracks Develop Before Phase II Even Starts, Oct 14 p 35

Cutting Fluids

Cutting Fluid Preservation Beats Dumping, by J. J. Obrzut, Dec 23 p 37

Cutting Tools

Abrasives Slice Up the High Alloys, by R. A. Wilson, July 15 p 62
Carbide Makers Get Hip with HIP, by R. A. Wilson, Sept 9 p 51
Carbide Tooling Gains an Edge, by J. E. Sandford, Dec 9 p 56
Engineering Plastics: The Pressure is On, by T. C. DuMont, Oct 21 p 71
Flame Cutting Warms Up to NC Tape, by J. E. Sandford, Aug 5 p 44
Growth, Change: Is NC Ready to Move Ahead? by K. W. Bennett, July 8 p 38
Hybrid Line Cuts Trapezoids, by B. D. Wakefield, Oct 28 p 47
Industry Warms Up to Supercold, by R. A. Wilson, Aug 26 p 55
Plasma Cutting Takes on Steel, by R. R. Irving, Aug 26 p 52
There's More to Lasers than Light, by J. E. Sandford, Oct 14 p 49

Cyclops Corp.:

System Holds Line to Tight Specs, by T. H. Malim, Oct 7 p 69
White Rust Controlled on Galvanized Steel, Nov 11 p 66

D**Dames & Moore**

Pollution Abroad: Fined First, Explain Later, by J. M. Beattie, Oct 28 p 30

Danly Machine Corp.:

MT Mission to Moscow: Great Success, by K. W. Bennett, July 1 p 35

Deburring

'Fuzzy' Deburs the Inaccessible, by B. D. Wakefield, Aug 12 p 78

Decision Sciences Corp.:

Electronic Crystal Ball Predicts Copper Prices, by James Beizer, July 8 p 77

Deere & Co.:

Farm Machines: A Bad Year Brightens, by K. W. Bennett, Sept 16 p 63
Holes: That's Where Your Money Goes, by B. D. Wakefield, July 22 p 43

Defense

Does Joblessness Demand New Kind of Cure? Oct 14 p 17

Delco Electronics Div.:

Industry's Quiet Rush to Silence, by J. E. Sandford, Dec 16 p 73

Delray Foundry Co.:

Foundries Face Up to the Crisis, by W. G. Patton, July 29 p 35

Derose Industries

Nixon Defrosts New Compact Appliances, by K. W. Bennett, Sept 9 p 63

Design Digest—Weekly Report of New Materials, Components and Engineering Ideas**DeVlieg Machine Co.:**

Europe, Imports Appeal Starts to Fade, Aug 26 p 46
Industry Warms Up to Supercold, by R. A. Wilson, Aug 26 p 55
MT Mission to Moscow: Great Success, by K. W. Bennett, July 1 p 35
Will Spring Tool Order Shower Last? by R. A. Wilson, July 29 p 27

Diamond Wheel Mfg. Institute

Industrial Diamond Future Begins to Sparkle, by K. W. Bennett, Sept 23 p 46

Diamonds

Industrial Diamond Future Begins to Sparkle, by K. W. Bennett, Sept 23 p 46

A. B. Dick Co.:

Closed-Loop System Sets the Trap for Shortage in Critical Parts, by B. D. Wakefield, Oct 21 p 77

Dies

Ford Adds Foreign Free-Form Scanner, by D. N. Williams, Sept 23 p 43

Diffusion Bonding

Titanium Joints Join Production Ranks, by T. H. Malim, July 22 p 47

Digital Equipment Corp.:

Mini Computer Makers Unveil Maxi System, Sept 23 p 61
Phasdom Strikes Again—Now it's Systems, by R. A. Wilson, Dec 16 p 62

Dillingham Co.:

Plasma Cutting Takes on Steel, by R. R. Irving, Aug 26 p 52

Dimetrics Corp.:

High-Speed Pulsating Welding Unit Jumps Mill Output of Stainless Tubing, by B. D. Wakefield, Dec 2 p 72

Direct Reduction

HyL is Going Strong South of the Border, by G. J. McManus, Nov 18 p 58

Display Systems

Closed-Loop System Sets the Trap for Shortage in Critical Parts, by B. D. Wakefield, Oct 21 p 77

Distribution Number Bank, Inc.:

Hope for Industry—by the Numbers, by K. W. Bennett, July 22 p 37

Diversified Manufacturing, Inc.:

There's More to Lasers than Light, by J. E. Sandford, Oct 14 p 49

Doehler-Jarvis Div.:

Die Casting Gets a New Alloy, Sept 9 p 69

Drafting

Modular Drafting System Advances by Application Tiers, by R. A. Wilson, Nov 25 p 77

Dravo Corp.:

Tool Steels Take the ESR Road, by G. J. McManus, Sept 23 p 55

Drilling

Holes: That's Where Your Money Goes, by B. D. Wakefield, July 22 p 43

Wilbur B. Driver Co.:

Mill Melts Almost 150 Alloys, by N. B. Schwartz, July 15 p 64

Drott Mfg. Co.:

Construction Rigs Bulling for '72 Power Upthrust, by K. W. Bennett, Nov 18 p 46

Ductile Iron

Foundries Face Up to the Crisis, by W. G. Patton, July 29 p 35

Ducommun Metals & Supply Co.:

Flame Cutting Warms Up to NC Tape, by J. E. Sandford, Aug 5 p 44

E. I. duPont de Nemours & Co.:

Industrial Diamond Future Begins to Sparkle, by K. W. Bennett, Sept 23 p 46
Needed: The Right Alloys to Tame Automobile Exhaust Emissions, by W. G. Patton, Sept 30 p 44
Patent Rights: Search for a Better System, Sept 23 p 27
Teflon for Heat Exchanger Tubing? by J. J. Obrzut, Sept 9 p 65

Duraloy Co.:

Is Inventory Spurt Now in Stock? Sept 30 p 33

Dvorkowitz & Associates

Coating Graphite Electrodes Cuts Costs, Aug 19 p 21

Dyersberg Div.:

Master Plan Develops Master Plant, by T. C. DuMont, Sept 16 p 84

Dynamet Corp.:

Now, Titanium Parts from Powder, by T. H. Malim, Nov 18 p 60

E**E & H Specialty Co.:**

Best Seller '72: 'Run, Robot, Run', by K. W. Bennett, Dec 23 p 26

Eastern Michigan University

Don't Curtail Recruiting Now, Aug 5 p 23
Now, Make Way for the Business Activist, Aug 5 p 23

Eastern Stainless Steel Co.:

'Argon-Oxygen' Bring New Life to Stainless, by R. R. Irving, Nov 11 p 61

Eastman Kodak Co.:

X-Ray System Makes Use of Paper Instead of Film, Oct 28 p 21

Eaton Corp.:

Safety Air Bag Inflated, Deflated in Three-Way Clash, by D. N. Williams, Dec 23 p 31

Ecology

SEE: Pollution, Air; Pollution, Water; Conservation

Economics

About '72—Optimism is Busting Out, by K. W. Bennett, Dec 16 p 59
After the 90-Day Freeze—NEP, Phase Two, by K. A. Kaufman, Sept 2 p 22
And Now Introducing (Ta-Ta-Tah) Phase III, by J. D. Baxter, Oct 14 p 35
Angry Unions Retort: Beware of 91st Day, Aug 26 p 19
Business on Profits: What Excess? by G. J. McManus, Sept 23 p 45
Can You Win an Election and Still Halt Inflation? by K. A. Kaufman, Dec 23 p 21
Compromise, Troika-Type Board Seen in Phase II, by K. A. Kaufman, Sept 23 p 44

Congress Gives Nixon's Plan Mixed Reviews, by K. A. Kaufman, Aug 26 p 21

Cracks Develop Before Phase II Even Starts, Oct 14 p 35

Economic Computers Don't Agree on Freeze's Effects, by D. N. Williams and P. J. Cathey, Sept 16 p 65

Economy: No Relief and No Hope? by G. J. McManus, Aug 12 p 57
Equipping the System for Survival? by Gene Beaudet, Aug 19 p 5

Fed Wage Control: Management's Worry, by G. J. McManus, July 15 p 46

Government Made a Friend—Business, by K. A. Kaufman, Aug 26 p 45

Hope Comes from Facing the Truth, by Gene Beaudet, Dec 23 p 6

Industry: Bold Tip-Toe Through Maze II, Nov 18 p 43

Is Mr. Nixon the Only One Who's Changed? by Gene Beaudet, Sept 30 p 5

Labor Wins a Voice in Planning NEP, Part II, Sept 2 p 21

Lagging Economy Calls for the Whip, by G. J. McManus, Aug 19 p 39

The Last Gasp of a Cycle . . . Hopefully, by Gene Beaudet, Aug 12 p 5

Let's Put this One in the Footnotes, by Gene Beaudet, Nov 25 p 5

The Mood Block Cracks, by J. D. Baxter, July 8 p 34

NEP: Is More Tax Relief in the Cards? by K. A. Kaufman, Sept 2 p 36

NEP Myth: 'Too Early to Tell', by K. W. Bennett, Aug 26 p 41

The New Trauma Afflicting U.S. Business, by Gene Beaudet, Nov 4 p 5

A Nice, Slow, Soggy Recovery, by K. A. Kaufman, July 15 p 43

Nixon Pressured to Make Income Policy Moves, by K. A. Kaufman, July 1 p 38

Nixonomics: Phase I to Haze II to Blue Funk? by J. M. Beattie, Nov 4 p 50

Nixon's Game Plan: From Slow to Stop, by K. A. Kaufman, Aug 19 p 35

Only 2 More Guessing Days to Phase II? by K. A. Kaufman, Nov 11 p 51

Optimism Grows for NEP's Inflation-Cutting Impact, by K. A. Kaufman, Sept 9 p 23

Phase II: Are its Clouds a Shroud? by K. A. Kaufman, Nov 18 p 41

Phase II's Go or No-Go Prospects Rated, by D. N. Williams, Nov 25 p 58

Phase II: Headed for Trouble, Oct 7 p 47

Productivity is Where the Heart Is, by Gene Beaudet, Sept 16 p 5

Q & A on the Big Giveaway, by Gene Beaudet, Sept 9 p 5

Response to NEP: Good, Bad and Ugly, by James Beizer, Aug 28 p 67

Sales Wait for Post-NEP Vertigo to Subside, by D. N. Williams, Sept 2 p 23

Shuts: Still the Economic Guru of the Nation, by K. A. Kaufman, July 8 p 21

Simple Life No Match for Work Ethic, Oct 21 p 21

Tax Credit: A Spending Springboard? Sept 9 p 49

'Things Aren't Bad Enough Yet', by S. H. Hockenberry, Aug 26 p 49

The Two Faces of Phase II Pricing, by G. J. McManus, Dec 9 p 39

Was Steel's Struggle in the Wage-Price Web Turning Point Toward New Economy? by G. J. McManus, Sept 9 p 55

What Else is There Left to Do? by James Beizer, Sept 2 p 5

What Nixon Wants Before Officially Devaluing Dollar, by K. A. Kaufman, Oct 7 p 21

Who'll Get Chill in Freeze Phase III? by K. A. Kaufman, Sept 16 p 64

Whom Might the Nixon Program Help Most? by Gene Beaudet, Oct 28 p 5

Why Did This Have to Take Three Months? by Gene Beaudet, Dec 16 p 5
 Why the Full Shock Treatment Was Needed, by Gene Beaudet, Aug 26 p 5
 Why Not Freeze Profits, Too, by Gene Beaudet, Oct 14 p 5
 Will the Whole Thing Fall Apart? by Gene Beaudet, Nov 11 p 5
 The Worst Trade Balance Since 1893! by Gene Beaudet, Aug 5 p 5

Economy Mfg. Co.:

Is Inventory Spurt Now in Stock? Sept 30 p 33

Education

Has Industry-Campus War Lost its Bang? by J. M. Beattie, Dec 2 p 58
 Where Have all the Promises Gone? by S. H. Hockenberry, July 8 p 42

Effects Technology, Inc.:

Charpy Learns a Lot of New Tricks, by T. H. Malim, Nov 25 p 76

Eisenwerk-Gesellschaft-Maximilian-shutte, mbh

Q-BOP: The New Big Bopper in Steelmaking? by G. J. McManus, Dec 23 p 28

Electralloy Corp.:

'Argon-Oxygen' Brings New Life to Stainless, by R. R. Irving, Nov 11 p 61

Electric Automobiles

Big Electric Auto Buy Lights Up Builders, by K. W. Bennett, Nov 4 p 51

Electric Discharge Machining

EDM-Winging Well Without Aerospace, by K. W. Bennett, Dec 2 p 53

Electric Power Production

Industry Gets Together on Floating Power Stations, Aug 26 p 27
 That Little Black Box in the Closet is a Slow Comer, by K. W. Bennett, Dec 9 p 43

Electrochemical Machining

EDM-Winging Well Without Aerospace, by K. W. Bennett, Dec 2 p 53

Electrodes

Coating Graphite Electrodes Cuts Costs, Aug 19 p 21

Electron Beams

Cyclops Introduces Electron Beam Stainless, by G. J. McManus, Nov 25 p 62
 There's More to Lasers than Light, by J. E. Sandford, Oct 14 p 49

Electronic Data Processing

Medical Hardware: Diagnosis Prosperity, by K. W. Bennett and C. J. Suchocki, Sept 2 p 32
 A Small Service Center's Challenge, by A. M. Greene, Aug 5 p 57
 Who's in Charge When Computers Meet? by K. W. Bennett, Aug 12 p 60

Electronic Devices & Controls

Are Workers Rights Only Part-Time? by S. H. Hockenberry, July 15 p 50
 Electrical Parts Given 'Withstandability' Ratings, by R. A. Wilson, Aug 12 p 77
 Electro-Controls Are Well, Coming, Are Coming . . . by D. N. Williams, Oct 21 p 25
 Electronic Ignition: \$35 and a Bag of Strange Parts, by D. N. Williams, Nov 11 p 23
 GE Powers Ford's New Casting Center, Oct 28 p 51
 M-G Sets Full Current from SCR Drives, by R. A. Wilson, July 15 p 47

Mill Managers Work in 'Real Time', Oct 7 p 68
 Surviving the Electronic Deluge, by J. E. Sandford, Nov 11 p 57
 System Holds Line to Tight Specs, by T. H. Malim, Oct 7 p 69

Electronic Memories & Magnetics Corp.:

Ecology: After Lacing Industry EPA Cracks its Whip at Cities, by K. W. Bennett, Oct 21 p 62
 Magnet Makers Magic Motors Make Money? by K. W. Bennett, Nov 25 p 59
 NEP Myth: 'Too Early to Tell', by K. W. Bennett, Aug 26 p 41

Electronics

Would You Believe a New Electronics Plant in Indiana? Oct 14 p 39

Electroplating

More Metal Cans Get Chromium Coats, July 15 p 61
 A Quantum Jump in Electroplating? by T. H. Malim, July 15 p 57

Electroslag

Russian ESR Technology is "Heavy", by N. B. Schwartz, July 8 p 45
 That 'Blue Sky' on Steelmaking's Horizon, by G. J. McManus, Dec 2 p 65
 Tool Steels Take the ESR Road, by G. J. McManus, Sept 23 p 55

Electrotherm Corp.:

That 'Blue Sky' on Steelmaking's Horizon, by G. J. McManus, Dec 2 p 65

Electro Tools Corp.:

EDM-Winging Well Without Aerospace, by K. W. Bennett, Dec 2 p 53

Eli Tool and Die Co.:

Automakers Like "Gluing", by T. C. DuMont, Aug 19 p 48

Eltra Corp.:

UAW Gets Cold Shoulder from Wage Freezers, Oct 7 p 21

Employment

The "Discouraged"—A Growing Fraternity, Sept 2 p 21
 Does Joblessness Demand New Kind of Cure? Oct 14 p 17
 Economic Computers Don't Agree on Freeze's Effects, by D. N. Williams and P. J. Cathey, Sept 16 p 65
 Exec Job Market Best it's Been in Two Years, Oct 14 p 25
 Executive Demand: Up from the Ashes, Oct 7 p 29
 Fewer Managers are Pounding the Bricks, July 15 p 27
 Job-Bias Bill Heads for Tough Senate Scrap, by K. A. Kaufman, Sept 30 p 17
 Jobless Rate: One Vote for More Gloom, Aug 19 p 15
 Nixon Inks Emergency Job Bill, July 22 p 18
 Nixon Pressured to Make Incomes Policy Moves, by K. A. Kaufman, July 1 p 38
 R & D Layoffs Cut Into Industry Muscle, by G. J. McManus, Oct 28 p 27
 Recovery Revives Executive Hopscotch, by R. A. Wilson, Sept 16 p 61
 Shultz: Still the Economic Guru of the Nation, by K. A. Kaufman, July 8 p 21
 Steel Summary: Forget August and September, July 29 p 44
 Where Have all the Promises Gone? by S. H. Hockenberry, July 8 p 42

Engelhard Industries

Must Small Plants Go Down the Drain? by J. J. Obrzut, July 1 p 49
 Needed: The Right Alloys to Tame Automobile Exhaust Emissions, by W. G. Patton, Sept 30 p 44

Engineers

Engineering Decisions are for Engineers, July 22 p 49

Engines, Automobile

'An Oil Gage is an Oil Gage is an Oil Gage', by D. N. Williams, Aug 26 p 23
 Automakers Turn on as Wankel Engine Starts to Purrr, by D. N. Williams, Oct 14 p 21
 Auto Prophecy: The Universal Engine, by D. N. Williams, Sept 2 p 39
 Hydrogen-Powered Car is Smog-Free but Not Trouble-Free, by T. H. Malim, Oct 14 p 55
 Turbine Engine Faces Ultimate Pollution Test—in New York, by D. N. Williams, Dec 23 p 20
 Wankel Engine Nears Production Turnpike, by D. N. Williams, Dec 9 p 45

Environmental Protection Agency

Can Detroit Weather Potomac Storm? by D. N. Williams, July 29 p 25
 'Clean Town' Cashes in on Daily Dirt, by R. A. Wilson, Sept 2 p 38
 Ecology: After Lacing Industry EPA Cracks its Whip at Cities, by K. W. Bennett, Oct 21 p 62
 Turbine Engine Faces Ultimate Pollution Test—in New York, by D. N. Williams, Dec 23 p 20

Environmental Protection Administration

Water Pollution: How Much is Public Willing to Pay? by K. A. Kaufman, Dec 16 p 23

Equal Employment Opportunity Commission

Job-Bias Bill Heads for Tough Senate Scrap, by K. A. Kaufman, Sept 30 p 17

Esco Corp.:

Plasma Cutting Takes on Steel, by R. R. Irving, Aug 26 p 52

Ethyl Corp.:

Needed: The Right Alloys to Tame Automobile Exhaust Emissions, by W. G. Patton, Sept 30 p 44

E. D. Etnyre & Co.:

Construction Rigs Bulling for '72 Power Upthrust, by K. W. Bennett, Nov 18 p 46

Europe

Europe, Imports Appeal Starts to Fade, Aug 26 p 46
 In Whatever Language a Strike is Still a Strike, Dec 2 p 27
 Pollution Abroad: Fined First, Explained Later, by J. M. Beattie, Oct 28 p 30

European Economic Community

Are Industry Mergers Key to Global Market? Oct 14 p 23
 Coal: EEC May Buy a Double Scoop Next Time, July 8 p 25
 Common Market Slips in Protest on Disc Plan, Oct 21 p 27
 Laborite Leaders Veto Market Entry, Aug 5 p 21

Ex-Cell-O Corp.:

Ex-Cell-O Corp. Tagged for Fattest Back-Pay Award, Aug 5 p 18
 Tool Builders Cut Down by Phase II Doubts, by R. A. Wilson, Dec 2 p 55
 Wankel Engine Nears Production Turnpike, by D. N. Williams, Dec 9 p 45
 Will Spring Tool Order Shower Last? by R. A. Wilson, July 29 p 27
 Will U. S. Let Mack Hack it in USSR? by R. A. Wilson, Aug 5 p 41
 Winging Well Without Aerospace, by K. W. Bennett, Dec 2 p 53

Executive, Man on the Move, Who's Who in Metalworking

Executives

. . . and General Motors Changes Around, Too, by D. N. Williams, Dec 16 p 64
 Close Look at the "Typical" Board, Aug 26 p 25
 Don't Hire Drones—You'll be Better Off, by S. H. Hockenberry, Nov 4 p 56
 Drop-out Manager Drops Back in with a Crusher, Aug 19 p 37
 Exec Job Market Best it's Been in Two Years, Oct 14 p 25
 Executive Demand: Up from the Ashes, Oct 7 p 29
 Executive Search Frustrates Top Brass, July 8 p 27
 Fewer Managers are Pounding the Bricks, July 15 p 27
 Final Say on Promotions—Let Boss' Boss Decide, by P. J. Cathey, Oct 21 p 66
 If You Are an Up Man in a Down Job, Look Out!, July 8 p 27
 Losing Management Touch? Blame the Megrimis, by S. H. Hockenberry, Nov 18 p 49
 More Company Directors are Getting the Ax, Aug 26 p 25
 Now—Make Way for the Business Activist, Aug 5 p 23
 Recovery Revives Executive Hopscotch, by R. A. Wilson, Sept 16 p 61
 Steel Begins to Lay Old Warriors to Rest, by G. J. McManus, Dec 16 p 64

Export-Import Bank

Exim's New Style: More Bucks, Less Red Tape, by K. A. Kaufman, Dec 23 p 31

F

FMC Corp.:

Diversifying: Everybody Into the Act, by K. W. Bennett, July 29 p 29

Fairfield Mfg. Co.:

Growth, Change: Is NC Ready to Move Ahead? by K. W. Bennett, July 8 p 33

Falconbridge Nickel Mines Ltd.:

Nopferous Ventures Prepare for Better Days, by James Beizer, Sept 16 p 67

Farm Equipment

Farm Machines: A Bad Year Brightens, by K. W. Bennett, Sept 16 p 63

Farrel Co.:

Giant Machines Change the Game, by J. E. Sandford, Aug 12 p 71
 Machine Tool Orders Up—with "Hope", by R. A. Wilson, Sept 30 p 55

Fasteners

Fasteners Start Switch to Metric, by R. R. Irving, Aug 5 p 55
 New Riveter Drives Rivets in Split Seconds, Nov 18 p 62
 Test the Assembly, Not the Fastener, Nov 4 p 66
 Why Are There So Many Fasteners? by H. H. Cunningham, Aug 19 p 44

Fedders Corp.:

Nixon Defrosts U. S. Compact Appliances, by K. W. Bennett, Sept 9 p 53

Federal-Mogul Corp.:

Air Bearings Make Machining a Breeze, by W. G. Patton, Aug 19 p 50
 Competitive Race Proves Too Much for Federal's Bearings, by D. N. Williams, Nov 4 p 53
 Industry: Bold Tip-Toe Through Maze II, Nov 18 p 43
 Superplasticity Pulls Ahead in Metal Forming, by T. C. DuMont, Nov 18 p 55

Federal Reserve Board

About '72—Optimism is Busting Out, by K. W. Bennett, Dec 16 p 59
 Fed Wage Control: Management's Wary, by G. J. McManus, July 15 p 46
 Lockheed May Pave the Way for More Corporate Aid, by K. A. Kaufman, July 1 p 21
 A Nice, Slow, Soggy Recovery, by K. A. Kaufman, July 16 p 43
 No Tight Rein on Interest Rates if Phase II Works, by K. A. Kaufman, Nov 11 p 21
 Trade Aid: Fed Hints at Easing Antitrust Laws, by K. A. Kaufman, Aug 5 p 19
 World Looks for Phase II on Trade Policy, by J. D. Baxter, Nov 25 p 55

Fiber Materials, Inc.

Felt Goes into Outer Space, by T. H. Malin, July 1 p 56

Finance

About '72—Optimism is Busting Out, by K. W. Bennett, Dec 16 p 59
 Chrysler, AMC Blot out the Red, by D. N. Williams, July 29 p 18
 Corporate Secrecy: Nader Finds Himself Some New Raiders, by K. A. Kaufman, Nov 18 p 23
 Could You Keep Them Awake Next Monday Morning? by Gene Beaudet, July 1 p 5
 Exim's New Style: More Bucks, Less Red Tape, by K. A. Kaufman, Dec 23 p 31
 Help Yourself to a 100 pct Return, by Gene Beaudet, Oct 21 p 5
 Hope Comes from Facing the Truth, by Gene Beaudet, Dec 23 p 5
 Is Monopoly GM's Favorite Game? by D. N. Williams, July 1 p 23
 Lockheed May Be Last Loser to Get Help, by K. A. Kaufman, Aug 12 p 21
 Lockheed May Pave the Way for More Corporate Aid, by K. A. Kaufman, July 1 p 21
 The New Trauma Affecting U.S. Business, by Gene Beaudet, Nov 4 p 5
 No Tight Rein on Interest Rates if Phase II Works, by K. A. Kaufman, Nov 11 p 21
 Profit Plans: They Gotta Have Heart, by J. D. Baxter, Sept 16 p 71
 Q & A on the Big Giveaway, by Gene Beaudet, Sept 9 p 5
 SBA Carries Water for Those Who Won't Drink, by S. H. Hockenberry, Nov 25 p 65
 Steel's Quarter was a Full Disaster, by G. J. McManus, Nov 4 p 47
 Tax Credit: A Spending Springboard? Sept 9 p 49
 This Is No Time to Stop Biting the Bullet, by Gene Beaudet, July 8 p 5
 Tool Builders Cut Down by Phase II Doubts, by R. A. Wilson, Dec 2 p 55

Finland

Finland's Industry Changes its Stripes, July 8 p 25

First National City Bank of New York

Business on Profits? What Excess? by G. J. McManus, Sept 23 p 45

Flynn & Dreifin

Forgers Get Hot for Furnaces, by K. W. Bennett, Oct 7 p 52

Ford Motor Co.

Auto Headache No. '72: Emissions and Imports, by D. N. Williams, Sept 16 p 23
 "Big Two" Automakers: A Hale and Hearty Season, by D. N. Williams, Aug 5 p 20
 Can Detroit Weather Potomac Storm? by D. N. Williams, July 29 p 25
 A 'Crash' Program Under Way for New Bumpers, by W. G. Patton, Nov 4 p 60
 Crystal Gazing: Manufacturing's Future, by D. N. Williams, July 1 p 44

Farm Machines: A Bad Year Brightens, by K. W. Bennett, Sept 16 p 63
 Fasteners Start Switch to Metric, by R. R. Irving, Aug 4 p 55
 Ford Adds Foreign Free-Form Scanner, by D. N. Williams, Sept 23 p 43
 Ford Figures its '72 Labor Costs: 10.9 Pct, Nov 25 p 19
 Ford's Newest Idea: A Bigger Hot-Strip Mill, by G. J. McManus, July 22 p 33
 GE Powers Ford's New Casting Center, Oct 28 p 51
 Henry Ford Looks into Auto's Crystal Ball, by D. N. Williams, Dec 16 p 25
 Industry: Bold Tip-Toe Through Maze II, Nov 18 p 43
 Is a Turbine Battle Shaping Up? by D. N. Williams, Sept 2 p 35
 Kama River Caper: Scene Three, by R. A. Wilson and K. A. Kaufman, Aug 19 p 32
 Mass Transit Mess: There's a Market Here Somewhere, by D. N. Williams, Nov 25 p 23
 'Messing' Around with Design: Shifts Gears at Ford, by D. N. Williams, Nov 18 p 25
 Robot Movie Stars at Ford as Use Increases, by D. N. Williams, Sept 30 p 38
 Safety Air Bags Inflated, Deflated in Three-Way Clash, by D. N. Williams, Dec 23 p 31
 Sales Wait for Post-NEP Vertigo to Subside, by D. N. Williams, Sept 2 p 23
 "Second Chance" Training at 3 Ford Plants, Sept 9 p 21
 Wankel Engine Nears Production Turnpike, by D. N. Williams, Dec 9 p 45
 Who's in Charge When Computers Meet? by K. W. Bennett, Aug 12 p 60

Forecasting

Automakers Become Doubting Thomases, Nov 11 p 53
 Boob Tube Bix Boffos, by K. W. Bennett, July 8 p 39
 Crystal Gazing: Manufacturing's Future, by D. N. Williams and W. G. Patton, July 1 p 44
 Economic Computers Don't Agree on Freeze's Effects, by D. N. Williams and P. J. Cathey, Sept 16 p 65
 Electronic Crystal Ball Predicts Copper Prices, by James Beizer, July 8 p 77
 Even Aluminum Clouds Have Silver Linings, by James Beizer, Dec 16 p 97
 Growth, Change: Is NC Ready to Move Ahead? by K. W. Bennett, July 8 p 38
 Henry Ford Looks into Auto's Crystal Ball, by D. N. Williams, Dec 16 p 25
 It's Been a Long Season—but Wait Until Next Year, Dec 23 p 52
 NEP Myth: 'Too Early to Tell', by K. W. Bennett, Aug 26 p 41
 The New Crusade: Effective Manpower Planning, Dec 9 p 25
 Prain Looks at Copper's Future: Expensive, by James Beizer, Nov 4 p 85
 Sales Wait for Post-NEP Vertigo to Subside, by D. N. Williams, Sept 2 p 23
 Statistical Monster Out of Control? Nov 4 p 19
 Steel Pact Foreshadows Future Nixon Watchdogging, by K. A. Kaufman, Aug 19 p 17
 Steel Summary: Are Things Really Looking Up? Nov 25 p 107
 Steel Summary: Coming on Strong by End of the Year? Sept 2 p 59
 Steel Summary: Dreary August is the Prospect, July 15 p 75
 Steel Summary: Everyone's Watching the New Cars, Sept 16 p 119
 Steel Summary: Footing Firms for Long-Term Growth, Sept 9 p 99
 Steel Summary: Looking Past October to November, Sept 30 p 54
 "Things Aren't Bad Enough Yet", by S. H. Hockenberry, Aug 26 p 49
 What's Due in '72? Check Here, Oct 28 p 13
 Will it be a Happy New Year for Scrap? Nov 25 p 110
 Will Spring Tool Order Shower Last? by R. A. Wilson, July 29 p 27

Foreign Trade

Auto Headache No. '72: Emissions and Imports, by D. N. Williams, Sept 16 p 23
 Big Jump in Russian Trade Stalled Until Nixon Visit, by K. A. Kaufman, Nov 25 p 66
 Chrome and Politics Provide Ingredients for Senate Stinger, by K. A. Kaufman, Oct 14 p 19
 Common Market Slips in Protest on Disc Plan, Oct 21 p 27
 Creeping Nationalism Cited as Barrier in U.S.-Japan Trade, Nov 11 p 25
 Dollar Float Stalls Steel Importers, Oct 28 p 29
 Europe, Imports Appeal Starts to Fade, Aug 26 p 46
 Exim's New Style: More Bucks, Less Red Tape, by K. A. Kaufman, Dec 23 p 31
 Government Made a Friend—Business, by K. A. Kaufman, Aug 26 p 45
 Hartke Pressures for Voluntary Import Limits, by K. A. Kaufman, Aug 5 p 43
 How Many Lineup Changes When You Go Global? Oct 7 p 29
 Investing in Australia? Don't Be an Ugly American, by James Beizer, Sept 2 p 61
 Investment Abroad Benefits U. S. Says Executive, Nov 25 p 25
 Is America Getting Red Carpet Treatment? by R. A. Wilson and G. J. McManus, Dec 9 p 42
 Japanese Open Door for New Steel Quota Plan, by K. A. Kaufman, Sept 9 p 52
 Japanese Seeking Development Aid for 'United' Aircraft, Nov 4 p 27
 Kama River Caper: Scene Three, by R. A. Wilson and K. A. Kaufman, Aug 19 p 32
 MT Mission to Moscow: Great Success, by K. W. Bennett, July 1 p 35
 Mr. 'Mack' Knives through Kama River Fog, by J. E. Sandford, Nov 18 p 44
 Music from Mexico—and it's Steel Not Tijuana Brass, by Gene Beaudet, Oct 14 p 40
 "New Realism" Urged in U. S. International Relations, by K. A. Kaufman, Sept 23 p 23
 Nixon Defrosts U. S. Compact Appearances, by K. W. Bennett, Sept 9 p 53
 Now Introducing: Made in Japan (U. S. A.), Dec 16 p 45
 Only a Domestic Upheaval Bars China's Trade Growth, Nov 11 p 25
 Overseas Builders Press U. S. Lead in NC Technology, by J. E. Sandford, Nov 25 p 60
 Pack Up the Rubles in Your Old Kit Bag . . . July 1 p 37
 Playing That Same Old Import Surcharge Song, by K. A. Kaufman, Dec 9 p 23
 Quotes: Yes; Surtax, No, Oct 21 p 105
 Steel Summary: Footing Firms for Long-Term Growth, Sept 9 p 99
 Steel Summary: A Hard Line on Import Quota Talks, Sept 23 p 79
 Steel Summary: Import Accord by Christmas? Dec 23 p 49
 Steel Summary: Record Imports Cast Dark Shadow, Aug 5 p 65
 The Story Behind Mack Trucks and the Kama River, by R. A. Wilson and H. R. Neal, Dec 9 p 47
 Tool-Die Makers Look at Kama River—and Beyond, Dec 2 p 13
 Trade Aid: Fed Hints at Easing Antitrust Laws, by K. A. Kaufman, Aug 5 p 19
 Trade Talk: Cattle Barons, Car Jocks and Whipping Boys, by K. A. Kaufman, Nov 25 p 21
 U.S.-Canada Automaker Pact May Finally Get Changed, by Robert Jamieson and D. N. Williams, Dec 9 p 44
 U. S. Termed 'Pivot' of Japan's Foreign Policy, Sept 9 p 27
 U. S. Trade Whistle Defends World Steel, by G. J. McManus, Oct 21 p 67
 Was Mack Sold Down the Kama River? by R. A. Wilson, Nov 4 p 49
 What Nixon Wants Before Officially Devaluing Dollar, by K. A. Kaufman, Oct 7 p 21
 What's in Russia's Bag of Exports? by J. M. Beattie, Dec 9 p 42

Will U. S. Let Mack Hack it in USSR? by R. A. Wilson, Aug 5 p 41
 World Looks for Phase II on Trade Policy, by J. D. Baxter, Nov 25 p 55
 The Worst Trade Balance Since 1893? by Gene Beaudet, Aug 5 p 5

Forging Industry

Aerospace Forgers Find Commercial Road Narrow, by R. A. Wilson, July 8 p 36
 Forgers Get Hot for Furnaces, by K. W. Bennett, Oct 7 p 52
 Forging Equipment Teamwork Strikes Competitive Blow, by J. J. Obrzut, Oct 21 p 76
 Is this Industry Forging Ahead—or Behind? by J. M. Beattie, Dec 2 p 59
 PM Forging Logjam Starts to Break Up, by J. J. Obrzut, Nov 11 p 64

Forgings

Aerospace Forgers Find Commercial Road Narrow, by R. A. Wilson, July 8 p 36
 Forging Equipment Teamwork Strikes Competitive Blow, by J. J. Obrzut, Oct 21 p 76
 Now, Titanium Parts from Powder, by T. H. Malin, Nov 18 p 60
 PM Forging Logjam Starts to Break Up, by J. J. Obrzut, Nov 11 p 64

Forschungsinstitut für Zahnrad und Getriebebau

Gear Lube Test Predicts Performance, Sept 9 p 67

Foundry Industry

Computer Takes Heat Off Melt Shop, by B. D. Wakefield, Sept 23 p 60
 Foundries Face Up to the Crisis, by W. G. Patton, July 29 p 35
 Foundry Weighs its Hot Metal to Improve Quality, Oct 28 p 46
 GM Molding a Giant Step for Casting? by D. N. Williams, Dec 23 p 30
 Holding Furnace Keeps Heat on Molten Metal, by G. J. McManus, Nov 25 p 78
 Kama River Caper: Scene Three, by R. A. Wilson and K. A. Kaufman, Aug 19 p 32
 Was Mack Sold Down the Kama River? by R. A. Wilson, Nov 4 p 49

Franklin Oil Corp.

Cutting Fluid Preservation Beats Dumping, by J. J. Obrzut, Dec 23 p 37

Franklin Smelting & Refining Co.

Oxy-Fuel Flames Fan Hot Metal, by R. R. Irving, Sept 2 p 45

Walter Frederick Friedman and Co.

Shed No Tears for the Planner, by S. H. Hockenberry, Sept 30 p 41

Frigidaire Div.

IUE Bargains to Save Jobs at Frigidaire, Sept 23 p 21

Fuel Cells

That Little Black Box in the Closet is a Slow Comer, by K. W. Bennett, Dec 9 p 43

Furnaces, Annealing

Blocks and Blankets Reline Furnace as Anchor Pin Makes Short Work of Project, by J. J. Obrzut, Dec 16 p 79

Furnaces, Arc

Double Shell Makes the Most of Arc Furnace Power, Nov 18 p 61

Furnaces, Blast

Oxy-Fuel Flames Fan Hot Metal, by R. R. Irving, Sept 2 p 45

Furnaces, Electric

Computer Takes Heat Off Melt Shop, by B. D. Wakefield, Sept 23 p 60
 Forgers Get Hot for Furnaces, by K. W. Bennett, Oct 7 p 52
 Forging Equipment Teamwork Strikes Competitive Blow, by J. J. Obrzut, Oct 21 p 76
 Foundries Face Up to the Crisis, by W. G. Patton, July 29 p 35
 GE Powers Ford's New Casting Center, Oct 28 p 51
 GM Molding a Giant Step for Casting? by D. N. Williams, Dec 23 p 30
 HoL Is Going Strong South of the Border, by G. J. McManus, Nov 18 p 58
 Holding Furnace Keeps Heat on Molten Metal, by G. J. McManus, Nov 25 p 78
 Plasma Furnaces Called Commercial, July 1 p 27
 That "Blue Sky" on Steelmaking's Horizon, by G. J. McManus, Dec 2 p 65

Furnaces, Electroslag

Tool Steels Take the ESR Road, by G. J. McManus, Sept 23 p 55

Furnaces, Melting

Mill Melts Almost 150 Alloys, by N. B. Schwartz, July 15 p 64

Furnaces, Vacuum

Heat-Treat Rules: Time for Change? by T. H. Malim, Aug 26 p 57

G**G. T. E. Sylvania, Inc.:**

Mill Melts Almost 150 Alloys, by N. B. Schwartz, July 15 p 64

Galvanizing

System Holds Line to Tight Specs, by T. H. Malim, Oct 7 p 69
 White Rust Controlled on Galvanized Steel, Nov 11 p 66

Garland Anderson

New Ideas to Solve Some New Problems, Nov 18 p 29

Gas Turbines

Is a Turbine Battle Shaping Up? by D. N. Williams, Sept 2 p 35

Gears

Can Designers Use 'Nutating' Motors? by R. A. Wilson, Dec 9 p 58
 Gear Lube Test Predicts Performance, Sept 9 p 67

General American Transportation Corp.:

Nixon's Game Plan: From Slow to Stop, by K. A. Kaufman, Aug 19 p 35

General Chipbreaker Drill Co.:

Holes: That's Where Your Money Goes, by B. D. Wakefield, July 22 p 43

General Dynamics Corp.:

U. S. Shipyards Turn the Corner, by B. D. Wakefield, Sept 16 p 77
 Will Composites Make it in Time? Oct 14 p 27

General Electric Co.:

A Bird? A Plane? No, Supercollider, by K. W. Bennett, July 15 p 44
 Cracks Develop Before Phase II Even Starts, Oct 14 p 35
 Electrical Parts Given 'Withstandability' Ratings, by R. A. Wilson, Aug 12 p 77
 GE Plants the Seed Money to Make NC Bloom, by J. E. Sandford, Nov 11 p 53
 GE Powers Ford's New Casting Center, Oct 28 p 51

GE Slashes Jet Engine Workers,

July 29 p 15
 Growth, Change: Is NC Ready to Move Ahead? by K. W. Bennett, July 8 p 38
 Industrial Diamond Future Begins to Sparkle, by K. W. Bennett, Sept 23 p 46
 Industrial Robot is Anchor Man in Plastic System, Nov 11 p 29
 Losing Management Touch? Blame the Megrim, by S. H. Hockenberry, Nov 18 p 49
 M-G Sets Pull Current from SCR Drives, by R. A. Wilson, July 15 p 47
 Magnet Makers Magic Motors Make Money? by K. W. Bennett, Nov 25 p 59
 Medical Hardware: Diagnosis Prosperity, by K. W. Bennett and C. J. Suchocki, Sept 2 p 32
 Phasedom Strikes Again—Now it's Systems, by R. A. Wilson, Dec 16 p 62
 Pretreating Speeds Plating of Plastics, Sept 30 p 51
 Satellites to Survey Earth's Natural Resources, Nov 25 p 29
 Small-Shop NC Via Teletype-writer, July 1 p 52
 There's More to Lasers than Light, by J. E. Sandford, Oct 14 p 49
 Tomorrow's Growth Market, Refrigerators? by K. W. Bennett, Oct 14 p 39
 The Two Faces of Phase II Pricing, by G. J. McManus, Dec 9 p 39
 Why Pure Science Needs More Soul, July 22 p 21

General Motors Corp.:

... and General Motors Changes Around, Too, by D. N. Williams, Dec 16 p 64
 Automakers Turn on as Wankel Engine Starts to Purrr, by D. N. Williams, Oct 14 p 21
 "Big Two" Automakers: A Hale and Hearty Season, by D. N. Williams, Aug 5 p 20
 Computer Pushes a Broom, Oct 21 p 63
 A 'Crash' Program Under Way for New Bumpers, by W. G. Patton, Nov 4 p 50
 Detroit's New 'Mixtrix' is Not All Feet, by D. N. Williams, Oct 7 p 25
 Dummies Died—But Some Only Slightly—in GM Safety Car, by D. N. Williams, Nov 4 p 25
 Electro-Controls Are, Well, Coming, Are Coming . . . , by D. N. Williams, Oct 21 p 25
 Fasteners Start Switche to Metric, by R. R. Irving, Aug 5 p 55
 GM Casts In-Plant Scrap into In-Plant Steel, by W. G. Patton, Dec 9 p 53
 GM is Out in Front with Bumpers that Bump, by D. N. Williams, Sept 9 p 25
 GM Molding a Giant Step for Casting? by D. N. Williams, Dec 23 p 30
 General Motors: In the Midst of Metamorphosis, by D. N. Williams, Sept 23 p 25
 IUE Bargains to Save Jobs at Frigidaire, Sept 23 p 21
 Industry's Quiet Rush to Silence, by J. E. Sandford, Dec 16 p 73
 Is Monopoly GM's Favorite Game? by D. N. Williams, July 1 p 23
 Is a Turbine Battle Shaping Up? by D. N. Williams, Sept 2 p 35
 Is it True What They Say About Chevysuz? by D. N. Williams, Dec 2 p 25
 Nixon's Game Plan: From Slow to Stop, by K. A. Kaufman, Aug 19 p 35
 Safety, Air Rules Affect Auto Materials Use, by D. N. Williams, Oct 28 p 19
 Sales Wait for Post-NEP Vertigo to Subside, by D. N. Williams, Sept 2 p 23
 There's More to Lasers than Light, by J. E. Sandford, Oct 14 p 49
 The Two Faces of Phase II Pricing, by G. J. McManus, Dec 9 p 39
 UAW Blasts Triennial Local Talks at GM, Nov 18 p 21
 Wankel Engine Nears Production Turnpike, by D. N. Williams, Dec 9 p 45
 Who Wears the Badge Around Here? by S. H. Hockenberry, Aug 12 p 65

General Radio Co.:

Computer Guides NC Punching, by T. H. Malim, Sept 23 p 58

General Steel Industries, Inc.:

Mergers: Profits are in the Giving, by G. J. McManus, July 22 p 38

Georgetown Steel Corp.:

U.S. Trade Whistle Deafens World Steel, by G. J. McManus, Oct 21 p 57

Georgetown University

Who Wears the Badge Around Here? by S. H. Hockenberry, Aug 12 p 65

Germany

Beetlemakers Bugged on Profit Decline Making New Minicar? Dec 2 p 27
 Gear Lube Test Predicts Performance, Sept 9 p 67
 In Whatever Language a Strike is Still a Strike, Dec 2 p 27
 Volkswagen Hurt in Orders Brake, Metalworkers Strike, Dec 16 p 27

Giddings & Lewis Machine Tool Co.:

Assembly Machines Push Up Stream, by R. A. Wilson, Aug 12 p 59
 Giant Machines Change the Game, by J. E. Sandford, Aug 12 p 71
 Holes: That's Where Your Money Goes, by B. D. Wakefield, July 22 p 43
 Industry's Quiet Rush to Silence, by J. E. Sandford, Dec 16 p 73
 MT Mission to Moscow: Great Success, by K. W. Bennett, July 1 p 35
 Machine Tool Orders Up—with "Hope", by R. A. Wilson, Sept 30 p 35
 Nixon's Game Plan: From Slow to Stop, by K. A. Kaufman, Aug 19 p 35
 Time Running Out on Tooling White Sale? by R. A. Wilson, Oct 21 p 60
 Tool Builders Cut Down by Phase II Doubts, by R. A. Wilson, Dec 2 p 55

Giffels Associates, Inc.:

Kama River Caper: Scene Three, by R. A. Wilson and K. A. Kaufman, Aug 19 p 32

Gilman Engineering & Mfg. Co.:

Assembly Machines Push Up Stream, by R. A. Wilson, Aug 12 p 59

Gleason Works

Can Designers Use 'Nutating' Motors? by R. A. Wilson, Dec 9 p 58

Golden Anderson Valve Specialty Co.:

Is Inventory Spurt Now in Stock? Sept 30 p 33

Golf Clubs

Steels Suit Golf Clubs to a Tee, by T. C. DuMond, Aug 5 p 51

William Gombert

'Things Aren't Bad Enough Yet', by S. H. Hockenberry, Aug 26 p 49

B. F. Goodrich Industrial Products Co.:

Automakers Like "Gluings", by T. C. DuMond, Aug 19 p 48

Goodyear Tire & Rubber Co.:

Computer Pushes a Broom, Oct 21 p 63

Gould, Inc.:

Slit a Foil; Make a Heater; Build a Plant, by K. W. Bennett, Nov 25 p 61

Government

The Adversary Complex Has Got to Go, by Gene Beaudet, July 29 p 5
 After the 90-Day Freeze-NEP, Phase Two, by K. A. Kaufman, Sept 2 p 22
 Celler Asks Appointment of Anti-Trust Czar, by K. A. Kaufman, Sept 16 p 21
 Compromise, Troika-Type Board Seen in Phase II, by K. A. Kaufman, Sept 23 p 44
 Congress Gives Nixon's Plan Mixed Reviews, by K. A. Kaufman, Aug 26 p 21
 Economy: No Relief and No Hope? by G. J. McManus, Aug 12 p 57
 Fed Wage Control: Management's Wary, by G. J. McManus, July 15 p 46
 Government Made a Friend—Business, by K. A. Kaufman, Aug 26 p 45
 Is Mr. Nixon the Only One Who's Changed, by Gene Beaudet, Sept 30 p 5
 Lockheed May be Last Loser to Get Help, by K. A. Kaufman, Aug 12 p 21
 Lockheed May Pave the Way for More Corporate Aid, by K. A. Kaufman, July 1 p 21
 Nader and Common Cause: Stamp Out Fast Write Offs, by K. A. Kaufman, July 15 p 23
 Nixonomics: Phase I to Haze II to Blue Funk? by J. M. Beattie, Nov 4 p 50
 Nixon Pressured to Make Incomes Policy Moves, by K. A. Kaufman, July 1 p 38
 Nixon's Game Plan: From Slow to Stop, by K. A. Kaufman, Aug 19 p 35
 Optimism Grows for NEP's Inflation-Cutting Impact, by K. A. Kaufman, Sept 9 p 23
 Pav Board: The Pawn in Nixon-Meany Tilt, by K. A. Kaufman, Dec 9 p 21
 Pension Reform: Covering the Uncovered, Nov 11 p 19
 Phase II: Headed for Trouble, Oct 7 p 47
 SBA Carries Water for Those Who Won't Drink, by S. H. Hockenberry, Nov 25 p 65
 Shultz: Still the Economic Guru of the Nation, by K. A. Kaufman, July 8 p 21
 Steel Pact Foreshadows Future Nixon Watchdogging, by K. A. Kaufman, Aug 19 p 17
 Steel Talks: Along Came Nixon, by K. A. Kaufman, July 8 p 37
 Things Aren't Bad Enough Yet', by S. H. Hockenberry, Aug 26 p 49
 Treasury Rescues Quick Write-Offs from Mills Ax, by K. A. Kaufman, Sept 30 p 37
 What Else is There Left to Do? by James Beizer, Sept 2 p 5
 What Nixon Wants Before Officially Devaluing Dollar, by K. A. Kaufman, Oct 7 p 21
 Whom Might the Nixon Program Help Most? by Gene Beaudet, Oct 28 p 5
 Why the Full Shock Treatment Was Needed, by Gene Beaudet, Aug 26 p 5

Granite City Steel Co.:

Economy: No Relief and No Hope? by G. J. McManus, Aug 12 p 57

Graphite

Coating Graphite Electrodes Cuts Costs, Aug 19 p 21

G. A. Gray Co.:

Giant Machines Change the Game, by J. E. Sandford, Aug 12 p 71

Gray and Ductile Iron Founders' Society

Foundries Face Up to the Crisis, by W. G. Patton, July 29 p 35

Grinding

Extend Use of Throw-Away Carbide Inserts, Dec 16 p 31
 Grinding Industry Turns to Allied Abrasive, by J. J. Obrzut, Oct 28 p 48

Industrial Diamond Future Begins to Sparkle, by K. W. Bennett, Sept 23 p 46
Ingersoll Upstages Bad Year with DNC Grinder, by K. W. Bennett, July 22 p 35

Grumman Aerospace Corp.:

Powder Metallurgy: A Sleeping Giant, Oct 7 p 63
There's More to Lasers than Light, by J. E. Sandford, Oct 14 p 49

Guerdon Industries, Inc.:

Factory Housing: High Rising Sales, by K. W. Bennett, Aug 5 p 42
Modular Homes: A Gold Mine or Land Mine? by K. W. Bennett, Nov 11 p 54

Guided Missiles

Plastic Missile Fired Successfully, Dec 9 p 27

H

Handy Associates

Exec Job Market Best it's Been in Two Years, Oct 14 p 25
Fewer Managers are Pounding the Bricks, July 15 p 27
Recovery Revives Executives Hopscotch, by R. A. Wilson, Sept 16 p 61

Hanna Mining Co.:

U. S. Iron Ore's Place in the Sun Shrinks and Pales, Oct 14 p 41

Hansen Engineering and Mfg. Co., Inc.:

Small-Shop NC Via Teletypewriter, July 1 p 52

Harvard Business School

How to Win Friends with and Influence Management, Oct 21 p 29

Hawthorne Metal Products Co.:

Industry Warms Up to Supercold, by R. A. Wilson, Aug 26 p 55

Edward N. Hay & Associates

If You are an Up Man in a Down Job, Look Out!, July 8 p 27

Hayes-Albion Corp.

Must Small Plants Go Down the Drain? by J. J. Obrzut, July 1 p 49

Hayssen Mfg. Co.:

Press Brake Goes for Broke, by R. R. Irving, Sept 2 p 52

Hazelett Strip Casting Corp.:

Infra-Red Checks Downtime, Sept 16 p 82

Health Programs

All About OSHA—or Don't Press Your Luck, by C. J. Suchocki, Dec 16 p 68
Health and Safety Services Need Personal Touch, Oct 28 p 17
Industry's Quiet Rush to Silence, by J. E. Sandford, Dec 16 p 73
Medical Hardware: Diagnosis Prosperity, by K. W. Bennett and C. J. Suchocki, Sept 2 p 32
OSHA Enforcement: You Haven't Seen Anything Yet, by K. A. Kaufman, Dec 23 p 21

Heat Exchangers

Teflon for Heat Exchanger Tubing? by J. J. Obrzut, Sept 9 p 65

Heat Treating

Forgers Get Hot for Furnaces, by K. W. Bennett, Oct 7 p 52
Heat-Treat Rules: Time for Change? by T. H. Malim, Aug 26 p 57
Industry Warms Up to Supercold, by R. A. Wilson, Aug 26 p 55
Pore-Free Die Casting Goes Commercial, Aug 12 p 29

Superplasticity Pulls Ahead in Metal Forming, by T. C. DuMond, Nov 18 p 55

Heating Elements

Holding Furnace Keeps Heat on Molten Metal, by G. J. McManus, Nov 25 p 78
Slit a Foil: Make a Heater: Build a Plant, by K. W. Bennett, Nov 25 p 61

Heidrick and Struggles

Close Look at the "Typical" Board, Aug 26 p 25
Executive Demand: Up from the Ashes, Oct 7 p 29
Fewer Managers are Pounding the Bricks, July 15 p 27
More Company Directors are Getting the Ax, Aug 26 p 25

Heltzel Steel Form & Iron Co.:

Construction Rigs Bulling for '72 Power Upthrust, by K. W. Bennett, Nov 18 p 46

Henning Bros. & Smith, Inc.:

Ecology: After Lacing Industry EPA Cracks its Whip at Cities, by K. W. Bennett, Oct 21 p 62

Donald M. Hesling

Auto Prophecy: The Universal Engine, by D. N. Williams, Sept 2 p 39

Hicast Corp.:

Plasma Furnaces Called Commercial, July 1 p 27

Hill Acme Co.:

Business on Profits: What Excess? by G. J. McManus, Sept 23 p 45

Hitachi Central Research Laboratory

Japan and U. S. Pool Computer Programs, Sept 2 p 25

Hitachi Sales Corp. of America

Boob Tube Biz Boffos, by K. W. Bennett, July 8 p 39

Hoegaess Corp.:

PM Forging Logjam Starts to Break Up, by J. J. Obrzut, Nov 11 p 64
That 'Blue Sky' on Steelmaking's Horizon, by G. J. McManus, Dec 2 p 65

Hojalata y Lamina, S. A. (Mexico)

HyL is Going Strong South of the Border, by G. J. McManus, Nov 18 p 58

Hole Making

That's Where Your Money Goes, by B. D. Wakefield, July 22 p 43

Holley Carburetor Div.:

Automotive Suppliers Walk Shaky Tightrope, by D. N. Williams, July 22 p 20

Holobeam, Inc.:

There's More to Lasers than Light, by J. E. Sandford, Oct 14 p 49

Honeywell, Inc.:

A Bird? A Plane? No, Supercomputer!, by K. W. Bennett, July 15 p 44
Final Say on Promotions—Let Boss' Boss Decide, by P. J. Cathy, Oct 21 p 66
Holes: That's Where Your Money Goes, by B. D. Wakefield, July 22 p 43
Medical Hardware: Diagnosis Prosperity, by K. W. Bennett and C. J. Suchocki, Sept 2 p 32
New Ideas to Solve Some New Problems, Nov 18 p 29
Training Schools: End or Means to an End? Oct 21 p 29

Hoover Co.:

Nixon Defrosts New Compact Appliances, by K. W. Bennett, Sept 9 p 53

Hospitals

Medical Care: Diagnosis Prosperity, by K. W. Bennett and C. J. Suchocki, Sept 2 p 32

Houdaille Industries, Inc.:

A 'Crash' Program Under Way for New Bumpers, by W. G. Patton, Nov 4 p 60
Europe, Imports Appeal Starts to Fade, Aug 26 p 46
Machine Tool Orders Up—with "Hope", by R. A. Wilson, Sept 30 p 35
NEP Myth: "Too Early to Tell", by K. W. Bennett, Aug 26 p 41
Will Spring Tool Order Shower Last? by R. A. Wilson, July 29 p 27

House of Stainless

Plasma Cutting Takes on Steel, by R. R. Irving, Aug 26 p 52

Housing

Factory Housing: High Rising Sales, by K. W. Bennett, Aug 5 p 42
Modular Homes: A Gold Mine or Land Mine? by K. W. Bennett, Nov 11 p 54
Modular Homes: Sizzle Fizzles, by K. W. Bennett, Dec 9 p 44

Hull Corp.:

It's a Plastics World for Capital Spending, by K. W. Bennett, Nov 11 p 49

Huntington Alloy Products Div.:

Abrasives Slice Up the High Alloys, by R. A. Wilson, July 15 p 62

Hydraulic Controls

Can Designers Use 'Nutating' Motors? by R. A. Wilson, Dec 9 p 58
Press Brake Goes for Broke, by R. R. Irving, Sept 2 p 52

Hydraulic Motors

Can Designers Use 'Nutating' Motors? by R. A. Wilson, Dec 9 p 58

Hydrogen

Hydrogen-Powered Car is Smog-Free but Not Trouble-Free, by T. H. Malim, Oct 14 p 55

Hypertherm, Inc.:

Plasma Cutting Takes on Steel, by R. R. Irving, Aug 26 p 52

Hyster Co.:

Construction Rigs Bulling for '72 Power Upthrust, by K. W. Bennett, Nov 18 p 46

IIT Research Institute

Best Seller '72: 'Run, Robot, Run', by K. W. Bennett, Dec 23 p 26
Engineering Plastics: The Pressure is On, by T. C. DuMond, Oct 21 p 71

ILZRO

Pore-Free Die Casting Goes Commercial, Aug 12 p 29

Illinois Tool Works, Inc.:

Holes: That's Where Your Money Goes, by B. D. Wakefield, July 22 p 43

Image Analyzing Computers, Inc.:

Programmed Analyzer Classifies Steel Inclusion Count, Dec 23 p 44

Indian Head, Inc.:

Profit Plans: They Gotta Have Heart, by J. D. Baxter, Sept 16 p 71

Industrial Briefs, Name Changes, Mergers, Acquisitions, Contracts

Industrial Engineering

What Industrial Engineers Would Like to Do, Nov 4 p 29

Industrial Fasteners Institute

Fasteners Start Switch to Metric, by R. R. Irving, Aug 5 p 55

Industrial Nucleonics Corp.:

A Small Service Center's Challenge, by A. M. Greene, Aug 5 p 57
System Hold Line to Tight Specs, by T. H. Malim, Oct 7 p 69

Industrial Relations

Are Front Offices Union-Growth Targets? Sept 30 p 15
Are Workers' Rights Only Part-Time? by S. H. Hockenberry, July 15 p 50
Charges Against Industry—and Answers, Sept 16 p 27
Different Strokes for Different Folks, by D. N. Williams, Aug 12 p 62
How Good a Plant Manager Are You? Aug 5 p 48
How to Spark Worker Groups to New Heights, July 1 p 25
If You Want to Know What's Going On—Rap with Employees, Oct 28 p 20
It is Time to Move Into a Glass House? Sept 16 p 27
Japanese System Sparks Incentive, Aug 19 p 51
Keeping Track of Hours Not Too Tough, Sept 30 p 22
Manage Your Output, Not Your Input, by D. N. Williams, Oct 14 p 44
Must Boss Know All the Answers—And Say So? July 22 p 21
Start Spreading the Word—and Keep at It, Oct 14 p 25
Try 4/40, You'll Like It—or Will You? by P. J. Cathy, Dec 23 p 35
What Survey Showed and Follow-Up, Oct 28 p 20
Who Opened That Window in the Board Room? Nov 25 p 27
Why Not a Four/Five Day Workweek? Sept 30 p 22

Industrial Security

Bomb Threats Shatter Executive Security, Sept 2 p 24

Information Systems

Hope for Industry—by the Numbers, by K. W. Bennett, July 22 p 37
Optical Reader Breaks Computer Logjam, July 15 p 60

Infrared

Infra-Red Checks Downtime, Sept 16 p 82

Ingersoll Milling Machine Co.:

Carbide Tooling Gains an Edge, by J. E. Sandford, Dec 9 p 66
Cracks Develop Before Phase II Even Starts, Oct 14 p 35
Giant Machines Change the Game, by J. E. Sandford, Aug 12 p 71
Ingersoll Upstages Bad Year with DNC Grinder, by K. W. Bennett, July 22 p 35

Ingersoll-Rand Co.:

NEP Myth: "Too Early to Tell", by K. W. Bennett, Aug 26 p 41

Injection Molding

See: Molding, Molds

Inland Steel Co.:

Has Industry-Campus War Lost its Bang? by J. M. Beattie, Dec 2 p 58
Inland Sinks Post-Contract Steel Hike, by G. J. McManus, July 1 p 40
Steel Begins to Lay Off Warriors to Rest, by G. J. McManus, Dec 16 p 64

Steel's Quarter was a Full Disaster, by G. J. McManus, Nov 4 p 47
That 'Blue Sky' on Steelmaking's Horizon, by G. J. McManus, Dec 2 p 66
Who's in Charge When Computers Meet? by K. W. Bennett, Aug 12 p 60
You Can't Have Your Political Cake and Tax Credit—Maybe, by K. A. Kaufman, Dec 2 p 23

Inquiries, Keyed Number for Reader Information Service

Institute of Management Science
Innovation: Who You Ask Decides What You'll Get, by D. N. Williams, Oct 7 p 49

Institute of Scrap Iron & Steel, Inc.:

NEP Myth: 'Too Early to Tell', by K. W. Bennett, Aug 26 p 41

Instrument Society of America
Who's in Charge When Computers Meet? by K. W. Bennett, Aug 12 p 60

Insurance Co. of North America
Learn to Spot Tippy Workers, Aug 12 p 27

Interlake, Inc.:
PM Forging Logjam Starts to Break Up, by J. J. Obrzut, Nov 11 p 64

International Assn. of Machinists
Aero Bargainers Fly Unfriendly Skies, Dec 9 p 19

International Brotherhood of Electrical Workers
Labor Wants a Thaw: Says Freeze is Unfair, Sept 9 p 21

International Brotherhood of Teamsters
Fitzsimmons Is in, but is Hoffa Out? July 16 p 21
Labor Wants a Thaw: Says Freeze is Unfair, Sept 9 p 21

International Business Machines Corp.:
A Bird? A Plane? No, Supercomputer! by K. W. Bennett, July 15 p 44
Optical Reader Breaks Computer Logjam, July 15 p 60
Superplasticity Pulls Ahead in Metal Forming, by T. C. DuMond, Nov 18 p 55

International Harvester Co.:
Farm Machines: A Bad Year Brightens, by K. W. Bennett, Sept 16 p 63

International Iron & Steel Institute
U. S. Trade Whistle Deafens World Steel, by G. J. McManus, Oct 21 p 57

International Longshoremen's Assn.:
Dockworkers Paint Unfriendly Picture, Aug 12 p 19
Nervous Nixon Watches Mine, Maritime Talks, Sept 30 p 15
Nixon Puts Dockworkers in Deep-Freeze, Dec 2 p 21
Phase II: Headed for Trouble, Oct 7 p 47
West Docks Alive—Rest of U. S. Down, Oct 14 p 17

International Nickel Co.:
Abrasives Slice Up the High Alloys, by R. A. Wilson, July 15 p 62
Gas Pipeline Challenges the Elements, by B. D. Wakefield, Nov 25 p 71
Needed: The Right Alloys to Tame Automobile Exhaust Emissions, by W. G. Patton, Sept 30 p 44

Nonferrous Second Quarter: Non-fantastic, by James Beizer, Aug 12 p 109

International Relations

Are Industry Mergers Key to Global Market? Oct 14 p 23
Chile, Something for Nothing? by James Beizer, Oct 7 p 50
Coal: EEC May Buy a Double Scoop Next Time, July 8 p 26
Common Market Slips in Protest on Disc Plan, Oct 21 p 27
Creeping Nationalism Cited as Barrier in U. S.—Japan Trade, Nov 11 p 25
Europe, Imports Appeal Starts to Fade, Aug 26 p 46
How Many Lineup Changes When You Go Global? Oct 7 p 29
Investment Abroad Benefits U. S. Says Executive, Nov 25 p 25
Japanese Open Door for New Steel Quota Plan, by K. A. Kaufman, Sept 9 p 52
"New Realism" Urged in U.S. International Relations, by K. A. Kaufman, Sept 23 p 23
U. S. Termed 'Pivot' of Japan's Foreign Policy, Sept 9 p 27
U. S. Trade Whistle Deafens World Steel, by G. J. McManus, Oct 21 p 57
World Looks for Phase II on Trade Policy, by J. D. Baxter, Nov 25 p 55

International Standards Organization

Fasteners Start Switch to Metric, by R. R. Irving, Aug 5 p 55

International Telephone & Telegraph Corp.:
Profit Plans: They Gotta Have Heart, by J. D. Baxter, Sept 16 p 71

International Union of Electrical Workers
IUE Bargains to Save Jobs at Frigidaire, Sept 23 p 21

International—Weekly Reports (See Also Subject Classification, Foreign Trade, Individual Countries)

Interprovincial Steel & Pipe Corp.:
Gas Pipeline Challenges the Elements, by B. D. Wakefield, Nov 25 p 71

Interthor, Inc.:
Wooden Pallets Can be a Materials Handling System, by B. D. Wakefield, Dec 2 p 71

Inventories
Big, Big Computer for Inventory Woes, by K. W. Bennett, Oct 7 p 51
Hope for Industry—by the Numbers, by K. W. Bennett, July 22 p 37
How to Beat the Metals Slump—or, 'Think Zinc', by James Beizer, Dec 23 p 51
Is Inventory Spurt Now in Stock? Sept 30 p 33
Optical Reader Breaks Computer Logjam, July 15 p 60
Steel Summary: Climbing Back Up Onto the Plateau, Dec 16 p 95
Steel Summary: Coming on Strong by End of the Year? Sept 2 p 59
Steel Summary: Drastic Stock Cutting After Aug 1, July 22 p 61
Steel Summary: Price Test Still in the Future, Aug 12 p 107
Steel Summary: Producers Caught in Market Vacuum, Aug 19 p 58

Iron Ore

HvL is Going Strong South of the Border, by G. J. McManus, Nov 18 p 58
U. S. Iron Ore's Place in the Sun Shrinks and Pales, Oct 14 p 41

Isuzu Motors Ltd.:

Is it True What They Say About Chevysuzi? by D. N. Williams, Dec 2 p 25

J

Jamaica

Alumina Residue Provides Useful Products, Dec 23 p 24

Japan

Creeping Nationalism Cited as Barrier in U.S.-Japan Trade, Nov 11 p 25
Investment Abroad Benefits U. S. Says Executive, Nov 25 p 25
Is it True What They Say About Chevysuzi? by D. N. Williams, Dec 2 p 25
Japan and U.S. Pool Computer Programs, Sept 2 p 25
Japan Holding Back on Steel Exports: Declines Jet Deal, Dec 23 p 22
Japanese Open Door for New Steel Quota Plan, by K. A. Kaufman, Sept 9 p 52
Japanese Seeking Development Aid for 'United' Aircraft, Nov 4 p 27
Japanese Set Up to Score Major Copper Goal, Nov 18 p 47
Japanese Steel Producer Wars with BSC Over Steel Orders, Dec 16 p 27
Japanese System Sparks Incentive, Aug 19 p 51
Now Introducing: Made in Japan (U. S. A.), Dec 16 p 65
Overseas Builders Press U. S. Lead in NC Technology, by J. E. Sandford, Nov 25 p 60
Pollution Abroad: Fined First, Explains Later, by J. M. Beattie, Oct 28 p 30
Pore-Free Die Casting Goes Commercial, Aug 12 p 29
Quotas, Yes; Surtax, No, Oct 21 p 105
Steel Cartel Breaks over Japan Horizon, Nov 18 p 27
Trade Aid: Fed Hints at Easing Antitrust Laws, by K. A. Kaufman, Aug 5 p 19
U. S. Termed 'Pivot' of Japan's Foreign Policy, Sept 9 p 27

Japan Iron and Steel Federation
Japan Holding Back on Steel Exports: Declines Jet Deal, Dec 23 p 22

Japan Steel Corp.:

Japan Holding Back on Steel Exports: Declines Jet Deal, Dec 23 p 22

Jeffrey Mining Machinery Co.:

Is America Getting a Red Carpet Treatment? by R. A. Wilson and G. J. McManus, Dec 9 p 42
Tool Buys: Ask More than the Obvious, by R. A. Wilson, Sept 23 p 49

Jerico, Inc.:

Holes: That's Where Your Money Goes, by B. D. Wakefield, July 22 p 43

Jessop Steel Co.:

Cracks Develop Before Phase II Even Starts, Oct 14 p 35

Jones & Lamson Div.:

Optical Gaging Speeds Design Time on New Products, by T. H. Malim, Dec 9 p 59

Jones & Laughlin Steel Corp.:

Coal User's Dirge: Boyle Fiddles, but What's Left to Burn? by G. J. McManus, Nov 11 p 52
Mill Managers Work in 'Real Time', Oct 7 p 68
Oxygen Steel Suits Continue, Nov 4 p 13
Steel Begins to Lay Old Warriors to Rest, by G. J. McManus, Dec 16 p 64
Steel vs USWA: An Impossible Mix, by G. J. McManus, July 29 p 23

Earle M. Jorgenson Co.:

Service Centers Bet on Tripled Business by 1980, Aug 12 p 61

Josam Mfg. Co.:

Modular Homes: A Gold Mine or Land Mine? by K. W. Bennett, Nov 11 p 54

Joslyn Mfg. and Supply Co.:

'Argon-Oxygen' Brings New Life to Stainless, by R. R. Irving, Nov 11 p 61
Refining Method Affects Machinability, July 8 p 47

K

KSM Welding Systems Div.:

Blocks and Blankets Relinquish Furnace as Anchor Pin Makes Short Work of Project, by J. J. Obrzut, Dec 16 p 79

Kaiser Aluminum & Chemical Corp.:

Aluminum Industry Easing Out of Doldrums, by James Beizer, Nov 4 p 52
Even Aluminum Clouds Have Silver Linings, by James Beizer, Dec 16 p 97

Kaiser Industries Corp.:

Oxygen Steel Suits Continue, Nov 4 p 13

Kama River

Kama River Caper: Scene Three, by R. A. Wilson, Aug 19 p 32
Mr. "Mack" Knives through Kama River Fog," by J. E. Sandford, Nov 18 p 44
The Story Behind Mack Trucks and the Kama River, by R. A. Wilson and H. R. Neal, Dec 9 p 47
Was Mack Sold Down the Kama River? by R. A. Wilson, Nov 4 p 49

Kawaguchi, Ltd.:

Best Seller '72: 'Run, Robot, Run', by K. W. Bennett, Dec 23 p 26

Kawecki Berylco Industries, Inc.:

Continuous Inoculation: The New Grain Refiner, by R. R. Irving, Oct 28 p 44

A. T. Kearney & Co., Inc.:

Modular Homes: A Gold Mine or Land Mine? by K. W. Bennett, Nov 11 p 54

Kearney & Trecker Corp.:

MT Mission to Moscow: Great Success, by K. W. Bennett, July 1 p 35
Nixon's Game Plan: From Slow to Stop, by K. A. Kaufman, Aug 19 p 35

Kelley Co.:

Must Small Plants Go Down the Drain? by J. J. Obrzut, July 1 p 49

Kennametal Inc.:

Carbide Makers Get Hip with HIP, by R. A. Wilson, Sept 9 p 51

Kennecott Copper Corp.:

After the Walts: Will Copper Price Sit it Out? by James Beizer, July 29 p 45
And Don't Bet on Payoffs in Chile Either . . . by James Beizer, Oct 21 p 59
Allende Claims He Got a Pig in the Copper Poke, by James Beizer, Nov 11 p 50
"Bargaining Fat" in Puerto Rico, by James Beizer, Oct 21 p 107
Chile, Something for Nothing? by James Beizer, Oct 7 p 50
Copper Strike Settlement: Might be a Long, Long Wait, by James Beizer, July 15 p 77
Up There, Where the Air is Rare—It's Expensive, by K. A. Kaufman, July 22 p 19

Ketchum, MacLeod & Groove, Inc.:

How Business Doctor Will Diagnose Sick Company's Ills, Nov 4 p 29

Lester B. Knight & Associates, Inc.:

Kama River Caper: Scene Three, by R. A. Wilson and K. A. Kaufman, Aug 19 p 32

Kobe Steel, Ltd.:

Japanese System Sparks Incentive, Aug 19 p 51
Pollution Abroad: Fined First, Explain Later, by J. M. Beattie, Oct 28 p 30

Koehring Co.:

It's a Plastics World of Capital Spending, by K. W. Bennett, Nov 11 p 49

Koppers Co., Inc.:

Fed Wage Control: Management's Wary, by G. J. McManus, July 15 p 46
Modular Homes: A Gold Mine or Land Mine? by K. W. Bennett, Nov 11 p 54
That 'Blue Sky' on Steelmaking's Horizon, by G. J. McManus, Dec 2 p 65

Kurlator Corp.:

Order Surge Looms for Textile Machinery Makers by K. W. Bennett, July 29 p 26

L**LTV Aerospace Corp.:**

Transit Poker Draws a Card, by S. H. Hockenberry, Sept 23 p 41

Labor

AFL-CIO Seeks Delay of Nixon's Control Powers, Nov 4 p 21
The Adversary Complex Has Got to Go, by Gene Beaudet, July 29 p 5
Aero Bargainers Fly Unfriendly Skies, Dec 9 p 19
Aeroworkers Await Word: PB Sets Exception Rules, Dec 23 p 18
Aluminum Outbacks Take Worker Toll, Nov 11 p 19
Angry Unions Retort: Beware of 91st Day, Aug 26 p 19
Anti-Bias Powers: NLRB a Tame Tiger in Own Court, Nov 18 p 21
Are Front Offices Union-Growth Targets? Sept 30 p 15
Are Worker's Rights Only Part-Time? by S. H. Hockenberry, July 15 p 50
Bethlehem Cited for Unfair Seniority, July 1 p 19
Coal Strike Kindles Smoldering Industry Ire, Oct 28 p 31
Copper: Not All the Horses are Home Yet, Aug 12 p 19
Copper Strike Has Silver Lining, by James Beizer, July 8 p 40
Copper Strike Settlement: Might be a Long, Long Wait, by James Beizer, July 15 p 77
The "Discouraged"—A Growing Fraternity, Sept 2 p 21
Dockworkers Paint Unfriendly Picture, Aug 12 p 19
Does Joblessness Demand New Kind of Cure? Oct 14 p 17
Ex-Cell-O Tagged for Pattest Back-Pay Award, Aug 5 p 18
Fed Wage Control: Management's Wary, by G. J. McManus, July 15 p 46
Fitzsimmons Is In, but Is Hoffa Out? July 15 p 21
The Flexible Week Is Becoming a Permanent Fixture, Nov 11 p 27
Ford Figures its '72 Labor Costs: 10.9 Pct, Nov 25 p 19
GE Slashes Jet Engine Workers, July 29 p 15
IUE Bargains to Save Jobs at Fridolite, Sept 23 p 21
In Whatever Language a Strike Is Still a Strike, Dec 2 p 27
Is Labor on its Last Ego Trip? by G. J. McManus, July 22 p 31
Jobless Rate: One Vite for More Gloom, Aug 19 p 15
King Coal to Nixon: Sorry, Old Soul, Oct 7 p 47

Labor Leaders Will Fight for Phase II Pay Raises, by K. A. Kaufman, Oct 21 p 23
Labor Talks Flow Despite Freeze, by G. J. McManus, Sept 30 p 39
Labor Wants a Thaw: Says Freeze is Unfair, Sept 9 p 21
Labor Wins a Voice in Planning NEP, Part II, Sept 2 p 21
Little Steel: Caught in Retroactivity Bind, Aug 26 p 19
Meany Stays in Bold Defiance of NEP, Nov 25 p 19
Mineworkers' Talk Hint at Peaceful Accord, Sept 23 p 21
Mr. Meany, Please Calm Down! by Gene Beaudet, Dec 2 p 5
NEP Bonus: Keeping Workers Off the Bricks, Nov 18 p 21
Nervous Nixon Watches Mine, Maritime Talks, Sept 30 p 15
Nixon Inks Emergency Job Bill, July 22 p 18
Nixon Puts Dockworkers in Deep Freeze, Dec 2 p 21
Pay Board: Abel, Hodgson and More Fat Cats to Come, Dec 16 p 21
Payboard Meets its First Test—Mineworkers, Oct 21 p 21
Pension Reform: Covering the Uncovered, Nov 11 p 19
Productivity Is Key for Abel's Bodies, Oct 28 p 17
"Second Chance" Training at 3 Ford Plants, Sept 9 p 21
Short Workweek Has Short Life at Chrysler, Dec 23 p 18
Steel Accord: Will Nixon Send 'Thank You' Note? Aug 19 p 15
Steel Pact: Now the Hangover Begins, by G. J. McManus and K. A. Kaufman, Aug 5 p 39
Steel Talks: Along Came Nixon, by K. A. Kaufman, July 8 p 37
Steel Talks: Local Strike Power Loses Steam, July 8 p 19
Steel Talks: Power to the Man-hour? by G. J. McManus, July 15 p 41
Steel vs USWA: An Impossible Mix, by G. J. McManus, July 29 p 23
Strike Snags Plague Little Steel, Oct 7 p 21
Telephone Workers Walk as CWA Snuffs Offer, July 22 p 18
"Thinks Aren't Bad Enough Yet", by S. H. Hockenberry, Aug 26 p 19
Tool-Die Shops 'Realistic' Pact, Aug 19 p 15
Try 4/40, You'll Like It—or Will You? by P. J. Cathey, Dec 23 p 35
UAW Blasts Triennial Local Talks at GM, Nov 18 p 21
UAW Gets Cold Shoulder from Wage Freezers, Oct 7 p 21
UAW Looks for Good Way to Skate Around Freeze, Oct 14 p 17
UAW Takes Wraps Off Aerospace Bargaining, Aug 5 p 18
UMW Accord Provides Key Test of Control Concept, Nov 18 p 21
UMW's Boyle: Troubled by Vealey's Confession, July 1 p 19
UTU Backs Up Threat with Whipsaw Strikes, July 22 p 18
UTU Sets "Whipsaw" Strikes for July 16, July 8 p 19
Wage Gains Weaken a Bit for First Nine Months, Nov 4 p 21
Was Steel's Struggle in the Wage-Price Web Turning Point Toward New Economy? by G. J. McManus, Sept 9 p 55
Well, Not Everybody is Still Out on Strike, July 29 p 15
West Docks Alive—Rest of U. S. Down, Oct 14 p 17
What Pay Board Will—and Won't—Do, by K. A. Kaufman, Dec 2 p 62
Why Not a Four/Five Day Workweek? Sept 30 p 22
Will Union Control Rest in Hands of the Public? Oct 21 p 21

Lasers

There's More to Lasers than Light, by J. E. Sandford, Oct 14 p 49

Laser Applications, Inc.:

There's More to Lasers than Light, by J. E. Sandford, Oct 14 p 49

Lathes

NC Lathe Paces Upturn of Profits, by J. E. Sandford, Dec 23 p 43
Small-Shop NC Via Teletypewriter, July 1 p 52

Law and Legal

Are Worker's Rights Only Part-Time? by S. H. Hockenberry, July 15 p 50
Is "No-Fault" Product Liability Coming? Sept 9 p 29
Product Liability: Let the Maker Beware, Nov 11 p 67
Who Wears the Badge Around Here? by S. H. Hockenberry, Aug 12 p 65

Lead

Asacro—the Fly in the Lead-Price Ointment, by James Beizer, Dec 16 p 65
Lead Price Fluctuation: Much Ado About Nothing, by James Beizer, July 1 p 81

LeBlond, Inc.:

Europe, Imports Appeal Starts to Fade, Aug 26 p 46
Polyfoam Patterns Casting Profits, Oct 28 p 50
Time Running Out on Tooling White Sale? by R. A. Wilson, Oct 21 p 60

Lectromelt Corp.:

Holding Furnace Keeps Heat on Molten Metal, by G. J. McManus, Nov 25 p 78

Legislation

All About OSHA—or Don't Press Your Luck, by C. J. Suchocki, Dec 16 p 68
Celler Asks Appointment of Anti-Trust Czar, by K. A. Kaufman, Sept 16 p 21
Chrome and Politics Provide Ingredients for Senate Stinger, by K. A. Kaufman, Oct 14 p 19
Congress Gives Nixon's Plan Mixed Reviews, by K. A. Kaufman, Aug 26 p 21
Corporate Secrecy: Nader Finds Himself Some New Raider, by K. A. Kaufman, Nov 18 p 23
Hartke Pressures for Voluntary Import Limits, by K. A. Kaufman, Aug 5 p 43
Investment Credit, Fast Write-Offs Get Senate Nod, by K. A. Kaufman, Nov 4 p 48
Hazardous Products: Who Watches the Watchdog? by K. A. Kaufman, July 29 p 17
Health and Safety Services Need Personal Touch, Oct 28 p 17
Job-Bias Bill Heads for Tough Senate Scrap, by K. A. Kaufman, Sept 30 p 17
Lockheed May be Last Loser to Get Help, by K. A. Kaufman, Aug 12 p 21
Mining Law Turns into Great Debate, by James Beizer, Sept 30 p 36
NEP: Is More Tax Relief in the Cards? by K. A. Kaufman, Sept 2 p 36
Nixon Inks Emergency Job Bill, July 22 p 18
Pension-Plan Law Prospects Get a Lift from Nixon, by K. A. Kaufman, Dec 16 p 63
Tool, Die Industry Blasts Senate Sale Bill, by K. A. Kaufman, Oct 21 p 23
Treasury Rescues Quick Write-Offs from Mills Ax, by K. A. Kaufman, Sept 30 p 37
Up There, Where the Air is Rare—It's Expensive by K. A. Kaufman, July 22 p 19
Who'll Get Chill in Freeze Phase II? by K. A. Kaufman, Sept 16 p 64
You Can't Have Your Political Cake and Tax Credit—Maybe, by K. A. Kaufman, Dec 2 p 23

Letter to the Editor, Information Feedback from Readers**Linde Div.:**

'Argon-Oxygen' Brings New Life to Stainless, by R. R. Irving, Nov 11 p 61
Flame Cutting Warms Up to NC Tape, by J. E. Sandford, Aug 5 p 44
Plasma Cutting Takes on Steel, by R. R. Irving, Aug 26 p 52
Refining Method Affects Machinability, July 8 p 47

Linear Alpha Corp.:

Big Electric Auto Buy Lights Up Builders, by K. W. Bennett, Nov 4 p 61

Little League Baseball, Inc.:

Standards Urged for Sports Equipment, July 22 p 23

Litton Industries

Litton Launches its First Ship, by B. D. Wakefield, July 8 p 48
Machine Tool Builders Wait for NEP Order Fallout, Sept 2 p 13

Lockheed Aircraft Corp.:

Lockheed May be Last Loser to Get Help, by K. A. Kaufman, Aug 12 p 21
Lockheed May Pave the Way for More Corporate Aid, by K. A. Kaufman, July 1 p 21
Transit Poker Draws a Card, by S. H. Hockenberry, Sept 23 p 41

Lockheed-California Co.:

Why Are there So Many Fasteners? by H. H. Cunningham, Aug 19 p 44

Lodge & Shipley Co.:

Europe, Imports Appeal Starts to Fade, Aug 26 p 46
Time Running Out on Tooling White Sale? by R. A. Wilson, Oct 21 p 60

Lord Corp.:

Innovation: Who You Ask Decides What You'll Get, by D. N. Williams, Oct 7 p 49

Lubricants

Cutting Fluid Preservation Beats Dumping, by J. J. Obrzut, Dec 23 p 37
Gear Lube Test Predicts Performance, Sept 9 p 67

Lucas Machine Div.:

Machine Tool Builders Wait for NEP Order Fallout, Sept 2 p 13

Lukens Steel Co.:

That 'Blue Sky' on Steelmaking's Horizon, by G. J. McManus, Dec 2 p 65

Edward A. Lynch Machinery Co., Inc.:

Press Brake Goes for Broke, by R. R. Irving, Aug 2 p 52

Mc**McDonnell Douglas Astronautics Co.:**

Aero Bargainers Fly Unfriendly Skies, Dec 9 p 19
Aeroworkers Await Word: PB Sets Exception Rules, Dec 23 p 18
A Bird? A Plane? No, Supercollider, by K. W. Bennett, July 15 p 44
Giant Machines Change the Game, by J. E. Sandford, Aug 12 p 71
Industry's Quiet Rush to Silence, by J. E. Sandford, Dec 16 p 73
Japanese Seeking Development Aid for 'United' Aircraft, Nov 4 p 27
Plasma Cutting Takes on Steel, by R. R. Irving, Aug 26 p 52

McGraw-Edison Co.:

Nixon Defrosts New Compact Appliances, by K. W. Bennett, Sept 9 p 53

McInnes Steel Co.:

Is this Industry Forging Ahead—or Behind? by J. M. Beattie, Dec 2 p 59

McKay Co.:

Stainless Welding Shields Itself, by R. R. Irving, July 1 p 54

John McKeone

Computer Pushes a Broom, Oct 21 p 63

McClouth Steel Corp.:

Little Steel: Caught in Retroactivity Bind, Aug 26 p 19

M**M & T Chemicals, Inc.:**

More Metal Cans Get Chromium Coats, July 15 p 61

Machine Tools

All About OSHA—or Don't Press Your Luck, by C. J. Suchocki, Dec 15 p 68

Assembly Machines Push Up Stream, by R. A. Wilson, Aug 12 p 59

Europe, Imports Appeal Starts to Fade, Aug 26 p 46

GE Plants the Seed Money to Make NC Bloom, by J. E. Sandford, Nov 11 p 53

Giant Machines Change the Game, by J. E. Sandford, Aug 12 p 71

Growth, Change? Is NC Ready to Move Ahead? by K. W. Bennett, July 8 p 38

Hope, Faith Do Not a Market Make, Oct 28 p 33

How Fast Can Abrasive Machining Go? by R. A. Wilson, July 22 p 34

Industry's Quiet Rush to Silence, by J. E. Sandford, Dec 16 p 73

Ingersoll Upstages Bad Year with DNC Grinder, by K. W. Bennett, July 22 p 35

Is Inventory Spurt Now in Stock? Sept 30 p 35

MT Mission to Moscow: Great Success, by K. W. Bennett, July 1 p 35

Machine Tool Builders Wait for NEP Order Fallout, Sept 2 p 13

Machine Tool Orders Up—with "Hope", by R. A. Wilson, Sept 30 p 35

Mr. Mack's Knives through Kama River Fog, by J. E. Sandford, Nov 18 p 44

NEP Myth: 'Too Early to Tell', by K. W. Bennett, Aug 26 p 41

Nixon's Game Plan: From Slow to Stop, by K. A. Kaufman, Aug 19 p 35

Overseas Builders Press U.S. Lead in NC Technology, by J. E. Sandford, Nov 25 p 60

Phasedom Strikes Again—Now it's Systems, by R. A. Wilson, Dec 16 p 62

Small-Shop NC Via Teletype-writer, July 1 p 52

Surviving the Electronic Deluge, by J. E. Sandford, Nov 11 p 57

Time Running Out on Tooling White Sale? by R. A. Wilson, Oct 21 p 60

Tool Builders Cut Down by Phase II Doubts, by R. A. Wilson, Dec 2 p 55

Tool Buys: Ask More than the Obvious, by R. A. Wilson, Sept 23 p 49

What Happens when Safety Inspector Comes to Town? by B. D. Wakefield, Oct 14 p 38

Will Spring Tool Order Shower Last? by R. A. Wilson, July 29 p 27

Will U. S. Let Mack Hack it in USSR? by R. A. Wilson, Aug 5 p 41

Machining

Air Bearings Make Machining a Breeze, by W. G. Patton, Aug 19 p 50

Engineering Plastics: The Pressure is On by T. C. DuMond, Oct 21 p 71

How Fast Can Abrasive Machining Go? by R. A. Wilson, July 22 p 34

Refining Method Affects Machinability, July 8 p 47

Mack Trucks, Inc.:

Kama River Caper: Scene Three, by R. A. Wilson and K. A. Kaufman, Aug 19 p 32

Mr. 'Mack' Knives through Kama River Fog, by J. E. Sandford, Nov 18 p 44

The Story Behind Mack Trucks and the Kama River, by R. A. Wilson and H. R. Neal, Dec 9 p 47

Was Mack Sold Down the Kama River? by R. A. Wilson, Nov 4 p 49

Who Knifed Mack Out of the Kama Plant? by R. A. Wilson, Sept 23 p 47

Will U. S. Let Mack Hack it in USSR? by R. A. Wilson, Aug 5 p 41

Magnets

Magnet Makers Magic Motors Make Money? by K. W. Bennett, Nov 25 p 59

Maintenance Engineering

Block and Blankets Reline Furnace as Anchor Pin Makes Short Work of Project, by J. J. Obrzut, Dec 16 p 79

Computer Pushes a Broom, Oct 21 p 63

Management

... and General Motors Changes Around, Too, by D. N. Williams, Dec 16 p 64

Are Worker's Rights Only Part-Time? by S. H. Hockenberry, July 15 p 50

Are You Too Small to be Good? by Gene Beaudet, Sept 23 p 5

Business Decides to Slug it Out with Dissenters, Dec 2 p 29

Business Gun Opens Fire on Critics, July 1 p 25

Business' Obligation to ... (Fill In), by Gene Beaudet, July 15 p 5

Charges Against Industry—and Answers, Sept 16 p 27

Close Look at the "Typical" Board, Aug 26 p 25

Could You Keep Them Awake Next Monday Morning? by Gene Beaudet, July 1 p 5

Decision-Making: Why Egghead Approaches Bomb Out, Dec 16 p 29

Different Strokes for Different Folks, by D. N. Williams, Aug 12 p 62

Diversifying: Everybody Into the Act, by K. W. Bennett, July 29 p 29

Don't Hire Drones—You'll be Better Off, by S. H. Hockenberry, Nov 4 p 56

Don't Leave the Job to Hired Hands, by Gene Beaudet, Dec 9 p 5

Drop-out Manager Drops Back in with a Crusher, Aug 19 p 37

Exim's New Style: More Bucks, Less Red Tape, by K. A. Kaufman, Dec 23 p 51

Fewer Managers are Founding the Bricks, July 15 p 27

Final Say on Promotions—Let Boss' Boss Decide, by P. J. Cathey, Oct 21 p 66

The Flexible Week is Fast Becoming a Permanent Fixture, Nov 11 p 27

Help Yourself to a 100 pct Return, by Gene Beaudet, Oct 21 p 5

How Business Doctor Will Diagnose Sick Company's Ills, Nov 4 p 29

How Good a Plant Manager Are You? Aug 5 p 48

How Many Lineup Changes When You Go Global? Oct 7 p 29

How to Spark Worker Groups to New Heights, July 1 p 25

How to Win Friends with and Influence Management, Oct 21 p 29

If You Are an Up Man in a Down Job, Look Out!, July 8 p 27

If You Want to Know What's Going On—Rap with Employees, Oct 28 p 20

Innovation: Who You Ask Decides What You'll Get, by D. N. Williams, Oct 7 p 49

Is it Time to Move Into a Glass House? Sept 16 p 27

Is "No-Fault" Product Liability Coming? Sept 9 p 29

Keeping Track of Hours Not Too Tough, Sept 30 p 22

Lackawanna: To be or Not to Be? by Scott Hayden, Dec 2 p 56

Learn to Spot Tipsy Workers, Aug 12 p 27

Let's Get Those Goals Really Integrated, July 15 p 27

Losing Management Touch? Blame the Meerrims, by S. H. Hockenberry, Nov 18 p 49

Manage Your Output, Not Your Input, Oct 14 p 44

More Company Directors are Getting the Ax, Aug 26 p 25

Must Boss Know All the Answers—And Say So? July 22 p 21

The New Crusade: Effective Manpower Planning, Dec 9 p 25

New Ideas to Solve Some New Problems, Nov 18 p 29

Now—Make Way for the Business Activist, Aug 5 p 23

Patent Rights: Search for a Better System, Sept 23 p 27

Productivity: Work Smarter, Not Faster, by T. H. Malim, Oct 7 p 57

Profit Plans: They Gotta Have Heart, by J. D. Baxter, Sept 16 p 71

Put it All Together—Products, Profit, Growth, by K. W. Bennett, Oct 28 p 37

Recovery Revives Executive Hopscotch, by R. A. Wilson, Sept 16 p 61

SBA Carries Water for Those Who Won't Drink, by S. H. Hockenberry, Nov 25 p 65

Shed No Tears for the Planner, by S. H. Hockenberry, Sept 30 p 41

Start Spreading the Word—and Keep at It, Oct 14 p 35

Steel Begins to Lay Old Warriors to Rest, by G. J. McManus, Dec 16 p 64

These Days it Takes Two to Tango, by Gene Beaudet, Nov 18 p 5

'Things Aren't Bad Enough Yet', by S. H. Hockenberry, Aug 26 p 26

This is No Time to Stop Biting the Bullet, by Gene Beaudet, July 8 p 5

Try 4/40 You'll Like It—or Will You? by P. J. Cathey, Dec 23 p 35

What Survey Showed and Follow-Up, Oct 28 p 20

Who Opened That Window in the Board Room? Nov 25 p 27

Who Wears the Badge Around Here? by S. H. Hockenberry, Aug 12 p 65

Who's in Charge When Computers Meet? by K. W. Bennett, Aug 12 p 60

Why Not a Four/Five Day Workweek? Sept 30 p 22

Will Consultants be Social Ombudsmen? Sept 2 p 24

You've Come a Long Way, Baby—in Some Ways! Aug 12 p 27

Management Survey and Search Corp.:

Executive Search Frustrates Top Brass, July 8 p 27

Manley Management & Marketing, Inc.:

Medical Hardware: Diagnosis Prosperity, by K. W. Bennett, and C. J. Suchocki, Sept 2 p 32

Marcena Corp.:

That 'Blue Sky' on Steelmaking's Horizon, by G. J. McManus, Dec 2 p 65

Maremont, Inc.:

Order Surge Looms for Textile Machinery Makers, by K. W. Bennett, July 29 p 26

Market Digest, Weekly Page of Marketing**Marketing**

Business' Obligation to ... (Fill In), by Gene Beaudet, July 15 p 5

Carbide Makers Get Hip with HIP, by R. A. Wilson, Sept 9 p 51

Economy: No Relief and No Hope? by G. J. McManus, Aug 12 p 57

Hope, Faith Do Not a Market Make, Oct 28 p 33

It's a Plastics World for Capital Spending, by K. W. Bennett, Nov 11 p 49

Mass Transit Mess: There's a Market Here Somewhere, by D. N. Williams, Nov 25 p 23

Medical Hardware: Diagnosis Prosperity, by K. W. Bennett and C. J. Suchocki, Sept 2 p 32

Now—Make Way for the Business Activist, Aug 5 p 23

Processing Coil—You've Got to Have a System, by R. A. Wilson, July 29 p 24

Profit Plans: They Gotta Have Heart, by J. D. Baxter, Sept 16 p 71

Put it All Together—Products, Profit, Growth, by K. W. Bennett, Oct 28 p 37

Steel Summary: Still Waiting for the Orders, Nov 18 p 87

Tomorrow's Growth Market, Refrigerators? by K. W. Bennett, Oct 14 p 39

Marlin Fire Arms Co.:

Optical Gaging Speeds Design Time on New Products, by T. H. Malim, Dec 9 p 59

Martin-Decker Co.:

Foundry Weighs its Hot Metal to Improve Quality, Oct 28 p 46

Martin Foundries Co.:

Foundries Face Up to the Crisis, by W. G. Patton, July 29 p 35

Master Chemical Corp.:

Cutting Fluid Preservation Bents Dumping, by J. J. Obrzut, Dec 23 p 37

Massachusetts Institute of Technology

Magnet Makers Magic Motors Make Money? by K. W. Bennett, Nov 25 p 59

A Quantum Jump in Electroplating? by T. H. Malim, July 15 p 57

Material Improvement, Inc.:

Industry Warms Up to Supercold, by R. A. Wilson, Aug 26 p 55

Materials

Charpy Learns a Lot of New Tricks, by T. H. Malim, Nov 25 p 76

Materials: Stress Use, Not More R&D, by G. J. McManus, Nov 25 p 62

Safety, Air Rules Affect Auto Materials Use, by D. N. Williams, Oct 28 p 19

Materials Handling

Industrial Robot is Anchor Man in Plastic System, Nov 11 p 29

Robot Movie Stars at Ford as Use Increases, by D. N. Williams, Sept 30 p 38

Wooden Pallets Can be Materials Handling System, by B. D. Wakefield, Dec 2 p 71

Mathews Conveyor Co.:

Business on Profits: What Excess? by G. J. McManus, Sept 23 p 45

Maxhutte (West Germany)

See: Eisenwerk-Gesellschaft-Maxhuttenshutte, mbh

Maynard Foundation

What Industrial Engineers Would Like to Do, Nov 4 p 29

Maytag Co.:

Nixon Defrosts U.S. Compact Appliance, by K. W. Bennett and C. J. Suchocki, Sept 2 p 32

Medical Electronics

Medical Hardware: Diagnosis Prosperity, by K. W. Bennett and C. J. Suchocki, Sept 2 p 32

Medtronic, Inc.:

Medical Hardware: Diagnosis Prosperity, by K. W. Bennett and C. J. Suchocki, Sept 2 p 32

Meetings and Conventions

Chicago Plays Host to 1971 AISE Meeting, Sept 9 p 74

- Computer Pushes a Broom, Oct 21 p 63
 Detroit Houses '71 Metal Show, Oct 7 p 75
 Mining Losses Dim Las Vegas Lights, by James Beizer, Oct 21 p 59
 Plastics Show Set for Chicago, Oct 21 p 85
- Meetings and Exhibits—Dates, Locations and Sponsors for Up-Coming Conferences, Meetings and Shows**
- Megadiamond Corp.:**
 Industrial Diamond Future Begins to Sparkle, by K. W. Bennett, Sept 23 p 46
- Mellon National Bank and Trust Co.:**
 What System Will Wage Board Really Use? Oct 28 p 16
- Melting**
 Computer Takes Heat Off Melt Shop, by B. D. Wakefield, Sept 23 p 60
 Continuous Inoculation: The New Grain Refiner, by R. R. Irving, Oct 28 p 44
 Foundries Face Up to the Crisis, by W. G. Patton, July 29 p 35
 Mill Melts Almost 150 Alloys, by N. B. Schwartz, July 15 p 64
 Oxy-Fuel Flames Fan Hot Metal, by R. R. Irving, Sept 2 p 45
- Menasco Mfg. Corp.:**
 A 'Crash' Program Under Way for New Bumpers, by W. G. Patton, Nov 4 p 60
- Mergers**
 Are Industry Mergers Key to Global Market? Oct 14 p 23
 Economy: No Relief and No Hope? by G. J. McManus, Aug 12 p 57
 Mergers: Profits are in the Giving, by G. J. McManus, July 22 p 38
 Steel Cartel Breaks over Japan Horizon, Nov 18 p 27
- Metal Carbide Corp.:**
 Carbide Makers Get Hip with HIP, by R. A. Wilson, Sept 9 p 51
- Metal Disintegrator, Inc.:**
 EDM-Winging Well Without Aerospace, by K. W. Bennett, Dec 2 p 53
- Metal Forming**
 Superplasticity Pulls Ahead in Metal Forming, by T. C. DuMond, Nov 18 p 55
- Metallurgy**
 'Argon-Oxygen' Brings New Life to Stainless, by R. R. Irving, Nov 11 p 61
 Beryllium Not a Metal, July 15 p 29
 Can a New Bearing Alloy Replace 52100 Steel? Aug 26 p 59
 Chlorination Increases Usable Metals Resources, Sept 16 p 29
 Continuous Inoculation: The New Grain Refiner, by R. R. Irving, Oct 28 p 44
 Die Casting Gets a New Alloy, Sept 9 p 69
 Foundry Weighs its Hot Metal to Improve Quality, Oct 28 p 46
 Heat-Treat Rules: Time for Change? by T. H. Malim, Aug 26 p 57
 Programmed Analyzer Classifies Steel Inclusion Count, Dec 23 p 44
 Superplasticity Pulls Ahead in Metal Forming, by T. C. DuMond, Nov 18 p 55
- Metal Powder Industries Federation**
 Now, Titanium Parts from Powder, by T. H. Malim, Nov 18 p 60
- Metalworking Industry**
 The Adversary Complex Has Got to Go, by Gene Beaudet, July 29 p 5
- Cutting Fluid Preservation Bents Dumping, by J. J. Obrzut, Dec 23 p 37
 Finland's Industry Changes its Stripes, July 8 p 25
 Foundries Face Up to the Crisis, by W. G. Patton, July 29 p 35
 Must Small Plants Go Down the Drain? by J. J. Obrzut, July 1 p 49
 A Nice, Slow, Soggy Recovery, by K. A. Kaufman, July 15 p 43
 Nixon's Game Plan: From Slow to Stop, by K. A. Kaufman, Aug 19 p 35
 Tax Credit: Just About in the Bag, by K. A. Kaufman, Dec 9 p 21
 You Can't Have Your Political Cake and Tax Credit—Maybe, by K. A. Kaufman, Dec 2 p 23
- Metalworking Labor—Weekly Report of Industrial Relations, Wages and Union Activities**
- Metalworking Newsfront—Capsule Digests of News Items Covering Steel, Nonferrous Metals and Related Industries**
- Metem Corp.:**
 EDM-Winging Well Without Aerospace, by K. W. Bennett, Dec 2 p 53
- Mexico**
 HyL is Going Strong South of the Border, by G. J. McManus, Nov 18 p 55
 Music from Mexico—and it's Steel Not Tijuana Brass, by Gene Beaudet, Oct 14 p 40
 The UG Process May Ease Problems Involving Bauxite, Oct 14 p 56
- Miami Copper Co.:**
 After the Walts: Will Copper Price Sit it Out? by James Beizer, July 29 p 45
- Michigan State University**
 Decision-Making: Why Egghead Approaches Bomb Out, Dec 16 p 29
 Jobless Rate: One Vote for More Gloom, Aug 19 p 15
- Micromatic Industries**
 Wankel Engine Nears Production Turnpike, by D. N. Williams, Dec 9 p 45
- Midland-Ross Corp.:**
 U.S. Iron Ore's Place in the Sun Shrinks and Pales, Oct 14 p 41
- Midvale-Heppenstall Co.:**
 Strike Snags Plague Little Steel, Oct 7 p 21
- Miller Electric Mfg. Co.:**
 Thin-Wall Tubing Allures Steel-makers, by B. D. Wakefield, Sept 30 p 50
- Mining Industry**
 Coal Strike Kindles Smoldering Industry Ire, Oct 28 p 31
 Latin Deposits: A Banker's Game, by James Beizer, Aug 19 p 38
 Mining Law Turns into Great Debate, by James Beizer, Sept 30 p 36
 Mining in New York? It's Way Back, by James Beizer, Oct 7 p 119
 Mining Losses Dim Las Vegas Lights, by James Beizer, Oct 21 p 59
 The UG Process May Ease Problems Involving Bauxite, Oct 14 p 56
 Why Old King Coal Isn't Very Merry, by K. A. Kaufman, Dec 9 p 41
- Mitsubishi Metal Mining Co.:**
 Japanese Set Up to Score Major Copper Goal, Nov 18 p 47
- Mobil Oil Corp.:**
 Gear Lube Test Predicts Performance, Sept 9 p 67
 GM Casts In-Plant Scrap into In-Plant Steel, by W. G. Patton, Dec 9 p 53
- Molding, Molds**
 GM Molding a Giant Step for Casting? by D. N. Williams, Dec 23 p 30
 Holes: That's Where Your Money Goes, by B. D. Wakefield, July 22 p 43
 Mill Equipment: Color it Black with Gray Streaks, by G. J. McManus, Oct 7 p 53
 Urethane Foam into Injection Molding, by T. H. Malim, Dec 23 p 40
- Moline Forge, Inc.:**
 Forgers Get Hot for Furnaces, by K. W. Bennett, Oct 7 p 52
- Motor and Machinery Castings Co.:**
 Foundries Face Up to the Crisis, by W. G. Patton, July 29 p 35
- Motorola, Inc.:**
 Boob Tube Biz Boffos, by K. W. Bennett, July 8 p 39
- N**
- NL Industries, Inc.:**
 Die Casting Gets a New Alloy, Sept 9 p 69
- Ralph Nader**
 Don't Leave the Job to Hired Hands, by Gene Beaudet, Dec 9 p 5
- National Aeronautics & Space Administration**
 Japan and U.S. Pool Computer Programs, Sept 2 p 25
 Will Composites Make it in Time? Oct 14 p 27
- National Assn. of Building Manufacturers**
 Factory Housing: High Rising Sales, by K. W. Bennett, Aug 5 p 42
- National Assn. of Purchasing Management**
 Is Inventory Spurt Now in Stock? Sept 30 p 33
 Prices: What You Want Isn't Always What You Get, by K. A. Kaufman and G. J. McManus, Dec 2 p 60
- National Bureau of Standards**
 Conversion to Metrics: Costly and Confusing, by K. A. Kaufman, Aug 5 p 45
- National Coal Assn.:**
 Coal User's Dirge: Boyle Fiddles, but What's Left to Burn? by G. J. McManus, Nov 11 p 52
- National Council on Physical Distribution Management**
 How to Win Friends with and Influence Management, Oct 21 p 29
- National Fluid Power Assn.:**
 All About OSHA—or Don't Press Your Luck, by C. J. Suchocki, Dec 18 p 68
- National Industrial Conference Board**
 Bomb Threats Shatter Executive Security, Sept 2 p 24
- Charges Against Industry—and Answers, Sept 16 p 27
 Is it Time to Move Into a Glass House? Sept 16 p 27
 What's Due in '72? Check Here, Oct 28 p 13
 Who Opened That Window in the Board Room? Nov 25 p 27
- National Institute of Health**
 Medical Hardware: Diagnosis Prosperity, by K. W. Bennett and C. J. Suchocki, Sept 2 p 32
- National Labor Relations Board**
 Anti-Bias Powers: NLRB a Tame Tiger in Own Court, Nov 18 p 21
- National Loss Control Service Corp.:**
 Is "No-Fault" Product Liability Coming? Sept 9 p 29
- National Machine Tool Builders Assn.:**
 Hope, Faith Do Not a Market Make, Oct 28 p 33
 Machine Tool Builders Wait for NEP Order Fallout, Sept 2 p 13
 Machine Tool Orders Up—with "Hope", by R. A. Wilson, Sept 30 p 35
 Mr. 'Mack' Knives through Kama River Fog, by J. E. Sandford, Nov 18 p 44
 Overseas Builders Press U.S. Lead in NC Technology, by J. E. Sandford, Nov 25 p 60
 Tool Builders Cut Down by Phase II Doubts, by R. A. Wilson, Dec 2 p 55
 What Happens when Safety Inspector Comes to Town? by B. D. Wakefield, Oct 14 p 38
 Will Spring Tool Order Shower Last? by R. A. Wilson, July 29 p 27
 Will U.S. Let Mack Hack it in USSR? by R. A. Wilson, Aug 5 p 41
- National Roll Div.:**
 Mergers: Profits are in the Giving, by G. J. McManus, July 22 p 38
- National Roll & Foundry Co.:**
 Mergers: Profits are in the Giving, by G. J. McManus, July 22 p 38
- National-Standard Co.:**
 Forgers Get Hot for Furnaces, by K. W. Bennett, Oct 7 p 52
- National Steel Corp.:**
 Economy: No Relief and No Hope? by G. J. McManus, Aug 12 p 57
 More Metal Cans Get Chromium Coats, July 15 p 61
 NEP Myth: 'Too Early to Tell', by K. W. Bennett, Aug 26 p 41
 Recycling Could Upset Scrap Industry, by G. J. McManus, July 1 p 39
- National Steel Service Center, Inc.:**
 Service Centers Bet on Tripled Business by 1980, Aug 12 p 61
- National Tool, Die & Precision Machining Assn.:**
 Is America Getting Red Carpet Treatment? by R. A. Wilson and G. J. McManus, Dec 9 p 42
 Tool, Die Industry Blasts Senate Sale Bill, by K. A. Kaufman, Oct 21 p 23
 Tool-Die Makers Look at Kama River—and Beyond, Dec 2 p 13
- Natural Gas**
 Gas Pipeline Challenges the Elements, by B. D. Wakefield, Nov 25 p 71
- Natural Gas Pipeline Co. of America**
 Gas Pipeline Challenges the Elements, by B. D. Wakefield, Nov 25 p 71
- New Britain Machine Co.:**
 It's a Plastics World for Capital Spending, by K. W. Bennett, Nov 11 p 49

New Broken Hill Consolidated Ltd.:
Nonferrous Ventures Prepare for Better Days, by James Beizer, Sept 16 p 67

New Equipment—Weekly Array of Latest Models and Accessories

New Idea Farm Equipment Div.:
Farm Machines: A Bad Year Brightens, by K. W. Bennett, Sept 16 p 63

New Jersey Zinc Co.:
Price Moves Dominate—Up, Down, Hesitant, by James Beizer, Aug 5 p 67

Newport News Shipbuilding Co.:
Shipbuilder Becomes Casting Producer, Nov 11 p 29

Nickel
Abrasives Slice Up the High Alloys, by R. A. Wilson, July 15 p 62
Needed: The Right Alloys to Tame Automobile Exhaust Emissions, by W. G. Patton, Sept 30 p 44

Nippon Kokan
Japanese System Sparks Incentive, Aug 19 p 51

Nippon Light Metal Co., Ltd.:
Pore-Free Die Casting Goes Commercial, Aug 12 p 29

Nippon Steel Corp.:
Mill Equipment: Color it Black with Gray Streaks, by G. J. McManus, Oct 7 p 53
Quotas, Yes; Surtax, No, Oct 21 p 105
R & D Layoffs Cut Into Industry Muscle, by G. J. McManus, Oct 28 p 27
Steel Cartel Breaks over Japan Horizon, Nov 18 p 27
U. S. Trade Whistle Deafens World Steel, by G. J. McManus, Oct 21 p 57

Nissan Motor Corp.:
Beetles Will Not be Hibernating Despite 'Freeze', by D. N. Williams, Oct 21 p 61
Europe, Imports Appeal Starts to Fade, Aug 26 p 46

Noise
Industry's Quiet Rush to Silence, by J. E. Sandford, Dec 16 p 73

Nondestructive Testing
Engineering Decisions are for Engineers, July 22 p 49
Technology Bank Draws Interest, by T. C. DuMond, July 29 p 39

Nonferrous Industry
Chile Copper Crisis Gets Warmer Again, by James Beizer, Dec 9 p 79
Copper is Metals' Newest Pauper, by James Beizer, Dec 23 p 29
Copper: Not All the Horses are Home Yet, Aug 12 p 19
Copper Strike Has Silver Lining, by James Beizer, July 8 p 40
Mining Losses Dim Las Vegas Lights, by James Beizer, Oct 21 p 59
Mining in New York? It's Way Back, by James Beizer, Oct 7 p 119
NEP Myth: 'Too Early to Tell', by K. W. Bennett, Aug 26 p 41
Nixon's Game Plan: From Slow to Stop, by K. A. Kaufman, Aug 19 p 35
Nonferrous Second Quarter: Non-fantastic, by James Beizer, Aug 12 p 109
Nonferrous Ventures Prepare for Better Days, by James Beizer, Sept 16 p 67
Only During the Depression Were Earnings Worse, by James Beizer, Nov 11 p 87
Pore-Free Die Casting Goes Commercial, Aug 12 p 29
Price Moves Dominate—Up, Down, Hesitant, by James Beizer, Aug 5 p 67
Prices: What You Want isn't Always What You Get, by K. A. Kaufman and G. J. McManus, Dec 2 p 60

Response to NEP: Good, Bad and Ugly, by James Beizer, Aug 26 p 67

Nonferrous Markets—Weekly Reports Including Prices (See Also James Beizer)

Nonferrous Metals
Die Casting Gets a New Alloy, Sept 9 p 69
What's in Russia's Bag of Exports? by J. M. Beattie, Dec 9 p 42

Noranda Sales Corp.:
Mining Losses Dim Las Vegas Lights, by James Beizer, Oct 21 p 59

North American Rockwell Corp.:
Aeroworkers Await Word: PB Sets Exception Rules, Dec 23 p 18
B-1 Bomber Mockup Weighs 45,000 Lb, Nov 25 p 39
Business Gun Opens Fire on Critics, July 1 p 25
Construction Rigs Bulling for '72 Power Upthrust, by K. W. Bennett, Nov 18 p 46
A 'Crash' Program Under Way for Bumpers, by W. G. Patton, Nov 4 p 60
Creeping Nationalism Cited as Barrier in U.S.-Japan Trade, Nov 11 p 25
Fed Wage Control: Management's Worry, by G. J. McManus, July 15 p 45
Phase II: Headed for Trouble, Oct 7 p 47
R&D Layoffs Cut Into Industry Muscle, by G. J. McManus, Oct 28 p 27
Technology Bank Draws Interest, by T. C. DuMond, July 29 p 39
UAW Takes Wraps Off Aerospace Bargaining Aug 5 p 15
Who's Got the Best Bumpers that Bump? by D. N. Williams, July 8 p 23

Northwest Foundry and Furnace Co.:
Foundry Weighs its Hot Metal to Improve Quality, Oct 28 p 46

Norton Co.:
Abrasives Slice Up the High Alloys, by R. A. Wilson, July 15 p 62
Ceramics Lose Dish-Fragile Image, Dec 16 p 80
Cracks Develop Before Phase II Even Starts, Oct 14 p 35
How Fast Can Abrasive Machining go? by R. A. Wilson, July 22 p 34
Industrial Diamonds Future Begins to Sparkle, by K. W. Bennett, Sept 23 p 46
A Quantum Jump in Electroplating? by T. H. Malim, July 15 p 57

Nuclear Power
Industry Gets Together on Floating Power Stations, Aug 26 p 27
Technology Bank Draws Interest, by T. C. DuMond, July 29 p 39

Numerical Control
Computer Guides NC Punching, by T. H. Malim, Sept 23 p 58
Flame Cutting Warms Up to NC Tape, by J. E. Sandford, Aug 5 p 44
Ford Adds Foreign Free-Form Scanner, by D. N. Williams, Sept 23 p 43
GE Plants the Seed Money to Make NC Bloom, by J. E. Sandford, Nov 11 p 53
Giant Machines Change the Game, by J. E. Sandford, Aug 12 p 71
Growth, Change: Is NC Ready to Move Ahead? by K. W. Bennett, July 8 p 38
Holes: That's Where Your Money Goes, by B. D. Wakefield, July 22 p 43
Industry's Quiet Rush to Silence, by J. E. Sandford, Dec 16 p 73
MT Mission to Moscow: Great Success, by K. W. Bennett, July 1 p 35
NC Lathe Paces Upturn of Profits, by J. E. Sandford, Dec 23 p 43
Overseas Builders Press U.S. Lead in NC Technology, by J. E. Sandford, Nov 25 p 60

Phasedom Strikes Again—Now It's Systems, by R. A. Wilson, Dec 16 p 62

Polyfoam Patterns Casting Profits, Oct 25 p 50
Small-Shop NC via Teletypewriter, July 1 p 52
The Story Behind Mack Trucks and the Kama River, by R. A. Wilson and H. R. Neal, Dec 9 p 47
Surviving the Electronic Deluge, by J. E. Sandford, Nov 11 p 57
There's More to Lasers than Light, by J. E. Sandford, Oct 14 p 49
Time Running Out on Tooling White Sale? by R. A. Wilson, Oct 21 p 60
Tool Buys: Ask More than the Obvious, by R. A. Wilson, Sept 23 p 49

Numerical Control, Inc.:
Ford Adds Foreign Free-Form Scanner, by D. N. Williams, Sept 23 p 43

Numerical Control Society
Overseas Builders Press U.S. Lead in NC Technology, by J. E. Sandford, Nov 25 p 60

O

Oak Ridge National Laboratory
Charpy Learns a Lot of New Tricks, by T. H. Malim, Nov 25 p 76

George Odierne
Manage Your Output, Not Your Input, by D. N. Williams, Oct 14 p 44

Office of Emergency Preparedness
Cracks Develop Before Phase II Even Starts, Oct 14 p 35

Ohio State University
Who's in Charge When Computers Meet? by K. W. Bennett, Aug 12 p 60

Old Ben Coal Co.:
Why Old King Coal Isn't Very Happy, by K. A. Kaufman, Dec 9 p 41

Oldberg Mfg. Co.:
Master Plan Develops Master Plant, by T. C. DuMond, Sept 16 p 84

Omark Industries
Blocks and Blankets Reline Furnace as Anchor Pin Makes Short Work of Project, by J. J. Obrzut, Dec 16 p 79

Onahama Smelting and Refining Co., Ltd.:
Japanese Set Up to Score Major Copper Goal, Nov 18 p 47

Optical Equipment
Optical Gaging Speeds Design Time on New Products, by T. H. Malim, Dec 9 p 59

Optical Systems
Optical Reader Breaks Computer Logjam, July 15 p 60
Programmed Analyzer Classifies Steel Inclusion Count, Dec 23 p 44

Kurt Orban Co.:
Europe, Imports Appeal Starts to Fade, Aug 26 p 46
West Docks Alive—Rest of U.S. Down, Oct 14 p 17

Organization Resources Counselors, Inc.:
Health and Safety Services Need Personal Touch, Oct 28 p 17

O'Sullivan Industries, Inc.:
Must Small Plants Go Down the Drain? by J. J. Obrzut, July 1 p 49

Owens-Corning Fiberglas Corp.:
Safety, Air Rules Affect Auto Materials Use, by D. N. Williams, Oct 28 p 19

Oxygen
Oxy-Fuel Flames Fan Hot Metal, by R. R. Irving, Sept 2 p 45
Q-BOP: The New Big Bopper in Steelmaking? by G. J. McManus, Dec 23 p 28

P

Pacific Maritime Assn.:
Dockworkers Paint Unfriendly Pictures, Aug 12 p 19

Pacific Press and Shear Corp.:
Press Brake Goes for Broke, by R. R. Irving, Sept 2 p 52

Packaging
Put Out the Garbage and Bring in a House? by J. M. Beattie, Nov 25 p 57

Packaging Machinery Manufacturers Institute
Put Out the Garbage and Bring in a House? by J. M. Beattie, Nov 25 p 57

Panefab International Corp.:
Modular Homes: A Gold Mine or Land Mine? by K. W. Bennett, Nov 11 p 54

Parker-Hannifin Corp.:
Can Designers Use 'Nutating' Motors? by R. A. Wilson, Dec 9 p 58

Patents
Patent Rights: Search for a Better System, Sept 23 p 27

Patent Management, Inc.:
Thin-Wall Tubing Allures Steelmakers, by B. D. Wakefield, Sept 30 p 50

Pay Board
Aeroworkers Await Word: PB Sets Exception Rules, Dec 23 p 18
Can You Win an Election and Still Halt Inflation? by K. A. Kaufman, Dec 23 p 21

Pay Board: Abel, Hodgson and More Fat Cats to Come, Dec 16 p 21

Pay Board: The Pawn in Nixon-Meany Tilt, by K. A. Kaufman, Dec 9 p 21

The Two Faces of Phase II Pricing, by G. J. McManus, Dec 9 p 39

What Pay Board Will—and Won't—Do, by K. A. Kaufman, Dec 2 p 62

Why Old King Coal Isn't Very Merry, by K. A. Kaufman, Dec 9 p 41

Pellets
U.S. Iron Ore's Place in the Sun Shrinks and Pales, Oct 14 p 41

Penn-Dixie Cement Corp.:
Little Steel Moves Into the Big Time, by K. W. Bennett, Sept 2 p 37

Pennsylvania Engineering Corp.:
Q-BOP: The New Big Bopper in Steelmaking? by G. J. McManus, Dec 23 p 28

Pensions
Pension-Plan Law Prospects Get a Lift from Nixon, by K. A. Kaufman, Dec 16 p 63
Pension Reform: Covering the Uncovered, Nov 11 p 19

Petroleum Industry
Needed: The Right Alloys to Tame Automobile Exhaust Emissions, by W. G. Patton, Sept 30 p 44
USSR Oil Leak: A Warning to Alaska's Pipelines? by I. G. Black, July 8 p 41

Phelps Dodge Corp.:
Copper is Metals' Newest Pauper, by James Beizer, Dec 23 p 29
Let George Do It—Copper Industry's Answer to Pricing, by James Beizer, Dec 2 p 83
Mining Law Turns into Great Debate, by James Beizer, Sept 30 p 36

Phillips Industries, Inc.:
Modular Homes: A Gold Mine or Land Mine? by K. W. Bennett, Nov 11 p 54

Phoenix Mfg. Co.:
Little Steel Moves Into the Big Time, by K. W. Bennett, Sept 2 p 37

Photon Sources

There's More to Lasers than Light, by J. E. Sandford, Oct 14 p 49

Pipelines

Drop-out Manager Drops Back in with a Crusher, Aug 19 p 37
Gas Pipeline Challenges the Elements, by B. D. Wakefield, Nov 25 p 71

Technology Bank Draws Interest, by T. C. DuMond, July 29 p 39
USSR Oil Leak: A Warning to Alaska's Pipeliners? by I. G. Black, July 8 p 41

Pittsburgh National Bank

Does Joblessness Demand New Kind of Cure? Oct 14 p 17

Planning

Shed No Tears for the Planners, by S. H. Hockenberry, Sept 30 p 41

Plasma Technology

Plasma Coatings Improved in Hardness, Density, by T. H. Malim, Sept 23 p 62
Plasma Cutting Takes on Steel, by R. R. Irving, Aug 26 p 52
Plasma Furnaces Called Commercial, July 1 p 27
Powder Metallurgy: A Sleeping Giant, Oct 7 p 63
That 'Blue Sky' on Steelmaking's Horizon, by G. J. McManus, Dec 2 p 65

Plastics

Engineering Plastics: The Pressure is On, by T. C. DuMond, Oct 21 p 71
Industrial Robot is Anchor Man in Plastic System, Nov 11 p 29
It's a Plastics World for Capital Spending, by K. W. Bennett, Nov 11 p 49
Patterns Find Coating in Urethane, Sept 9 p 70
Plastics Missile Fired Successfully, Dec 9 p 27
Plastics Show Set for Chicago, Oct 21 p 85
Polyfoam Patterns Casting Profits, Oct 28 p 50
Pretreating Speeds Plating of Plastics, Sept 30 p 51
Safety: Air Rules Affect Auto Materials Use, by D. N. Williams, Oct 28 p 19
Teflon for Heat Exchanger Tubing? by J. J. Obrzut, Sept 9 p 65
Urethanes Foam into Injection Molding, by T. H. Malim, Dec 23 p 40

Plating

Adhesive Bonding Holds Plated Strip to Cast Iron Ways, by T. H. Malim, Oct 21 p 78
Pretreating Speeds Plating of Plastics, Sept 30 p 51

Pollution, Air

Auto Headache No. '72: Emissions and Imports, by D. N. Williams, Sept 16 p 23
Auto Pollution: If You Smoke, Don't Drive, by D. N. Williams, Aug 19 p 19
Can Detroit Weather Potomac Storm? by D. N. Williams, July 29 p 25
Ecology: After Lacing Industry EPA Cracks its Whip at Cities, by K. W. Bennett, Oct 21 p 62
Foundries Face Up to the Crisis, by W. G. Patton, July 29 p 35
Hydrogen-Powered Car is Smog-Free but Not Trouble-Free, by T. H. Malim, Oct 14 p 55
Japanese Set Up to Score Major Copper Goal, Nov 18 p 47
Measuring the Methods to Measure Air Pollution, Sept 9 p 31
Must Small Plants Go Down the Drain? by J. J. Obrzut, July 1 p 49
Needed: The Right Alloys to Tame Automobile Exhaust Emissions, by W. G. Patton, Sept 30 p 44
Pollution Abroad: Fined First, Explained Later, by J. M. Beattie, Oct 28 p 30
Pollution from the Antitrusts, by Gene Beaudet, Oct 7 p 5
Safety + Emission Rules = Orders for Suppliers? by D. N. Williams, July 15 p 25

Technology: It's Great—for Things, Not People, by S. E. Lehman, July 22 p 36
Turbine Engine Faces Ultimate Pollution Test—in New York, by D. N. Williams, Dec 23 p 20
Up There, Where the Air is Rare—It's Expensive, by K. A. Kaufman, July 22 p 19

Pollution, Water

Cutting Fluid Preservation Beats Dumping, by J. J. Obrzut, Dec 23 p 37
Ecology: After Lacing Industry EPA Cracks its Whip at Cities, by K. W. Bennett, Oct 21 p 62
Water Pollution: How Much is Public Willing to Pay? by K. A. Kaufman, Dec 16 p 23

Polymer Corp.

Engineering Plastics: The Pressure is On, by T. C. DuMond, Oct 21 p 71

Polytechnic Institute of Brooklyn

Chlorination Increases Usable Metals Resources, Sept 16 p 29

H. K. Porter Co., Inc.

Don't Hire Drones—You'll be Better Off, by S. H. Hockenberry, Nov 4 p 56
Transit Poker Draws a Card, by S. H. Hockenberry, Sept 23 p 41

Postal Services Advisory Council

Chilton President McKenna on Postal Services Council, Oct 28 p 18

Powder Coatings

Make Room for Powder Coatings, by J. J. Obrzut, Sept 2 p 48

Powdered Metals

Materials: Stress Use, Not More R&D, by G. J. McManus, Nov 25 p 62
Now, Titanium Parts from Powder, by T. H. Malim, Nov 18 p 60
PM Forging Logjam Starts to Break Up, by J. J. Obrzut, Nov 11 p 64
Powder Metallurgy: A Sleeping Giant, Oct 7 p 63
Superplasticity Pulls Ahead in Metal Forming, by T. C. DuMond, Nov 18 p 55

Prob. Conveyors, Inc.

Best Seller '72: 'Run, Robot, Run', by K. W. Bennett, Dec 23 p 26

Pruitt & Whitney Aircraft Corp.

Materials: Stress Use, Not More R&D, by G. J. McManus, Nov 25 p 62
Optical Gaging Speeds Design Time on New Products, by T. H. Malim, Dec 9 p 59
Powder Metallurgy: A Sleeping Giant, Oct 7 p 63
Superplasticity Pulls Ahead in Metal Forming, by T. C. DuMond, Nov 18 p 55
That Little Black Box in the Closet is a Slow Comer, by K. W. Bennett, Dec 9 p 43

Precision-Cincinnati, Inc.

Assembly Machines Push Up Stream, by R. A. Wilson, Aug 12 p 59

Precision Coil Processing, Inc.

A Small Service Center's Challenge, by A. M. Greene, Aug 5 p 57

Press Brakes

Press Brake Goes for Broke, by R. R. Irving, Sept 2 p 52

Press Products, Inc.

Industry Warms Up to Supercold, by R. A. Wilson, Aug 26 p 55

Pressure Vessels

Wire Takes Pressure from Gas Storage Tanks, Dec 23 p 24

Price Commission

Can Price Board Afford the Aspirin it May Need? by K. A. Kaufman, Oct 28 p 18

Can You Win an Election and Still Halt Inflation? by K. A. Kaufman, Dec 23 p 21

Pay Board: The Pawn in Nixon-Meaney Tilt, by K. A. Kaufman, Dec 9 p 21

Phase II: Are its Clouds a Shroud? by K. A. Kaufman, Nov 18 p 41

The Price Commission with a Credibility Gap? by K. A. Kaufman, Dec 16 p 61

Prices: What You Want isn't Always What You Get, by K. A. Kaufman and G. J. McManus, Dec 2 p 60

Steel Summary: Higher Prices Slow to Show, Dec 9 p 77

Steel Summary: Will Price Hikes Start a Scramble? Dec 2 p 81

The Two Faces of Phase II Pricing, by G. J. McManus, Dec 9 p 39

Why Old King Coal Isn't Very Happy, by K. A. Kaufman, Dec 9 p 41

Prices—Steel Industry's Most Up-**To-Date Weekly Tabulation****of Prices for All****Forms of Steel from****Scrap to Strip****Prices**

After the Waltz: Will Copper Price Sit it Out? by James Beizer, July 29 p 45

Aluminum Industry Easing Out of Doldrums, by James Beizer, Nov 4 p 62

Aluminum Prices: Sick Patient Deals in Black Humor, by James Beizer, Sept 30 p 55

Aluminum Refuses Realistic Pricing After Big Cut, by James Beizer, Oct 14 p 65

Asarco—the Fly in the Lead-Price Ointment, by James Beizer, Dec 16 p 65

Copper: Measuring High Cost at 50 Cents a Lb., by James Beizer, Oct 21 p 107

Copper Pricing: An End to Tail Wagging the Dog, by James Beizer, Aug 19 p 61

Copper Strike Has Silver Lining, by James Beizer, July 8 p 40

Economy: No Relief and No Hope? by G. J. McManus, Aug 12 p 57

Electronic Crystal Ball Predicts Copper Prices, by James Beizer, July 8 p 77

Government Made a Friend—Business, by K. A. Kaufman, Aug 26 p 45

Inland Sinks Post-Contract Steel Hike, by G. J. McManus, July 1 p 40

Is Zinc Heading for Dual-Pricing System? by James Beizer, Oct 28 p 61

Just How Low Are Scrap Prices? Dec 2 p 84

Lagging Economy Calls for the Whip, by G. J. McManus, Aug 19 p 39

Lead Price Fluctuation: Much Ado About Nothing, by James Beizer, July 1 p 81

Let George Do It—Copper Industry's Answer to Pricing, by James Beizer, Dec 2 p 83

Limited Mill Buys Bring About a Price Drop, Oct 21 p 109

Mills Think Market Will Sustain Approved Price Hikes, by G. J. McManus, Dec 16 p 61

NEP Myth: 'Too Early to Tell', by K. W. Bennett, Aug 26 p 41

OEP Takes Scrap Prices Out of the Deep Freeze, Aug 26 p 67

The Price Commission with a Credibility Gap? by K. A. Kaufman, Dec 16 p 61

Price Freeze Puts Market in Confusion, Aug 19 p 62

Price Moves Dominate—Up, Down, Hesitant, by James Beizer, Aug 5 p 67

Prices Erode Slowly: Supply Drops Off, July 15 p 78

Prices Hold as Market Crawls Toward Stalemate, July 22 p 64

Prices Sag Off as Mill Buyers Call the Tune, Oct 7 p 120

Response to NEP: Good, Bad and Ugly, by James Beizer, Aug 26 p 67

Steel Pact: Now the Hangover Begins, by G. J. McManus and K. A. Kaufman, Aug 5 p 39

Steel Summary: Cloud of Confusion Hangs Over Price, Aug 26 p 65

Steel Summary: Higher Prices Slow to Show, Dec 9 p 77

Steel Summary: Price Test Still in the Future, Aug 12 p 107

Steel Summary: Quick Test for Price Guidelines? Nov 11 p 85

Steel Summary: Uncertainty Holds Recovery Back, Nov 4 p 83

Steel Summary: Will Price Hikes Start a Scramble? Dec 2 p 81

Time Running Out on Tooling White Sale? by R. A. Wilson, Oct 21 p 60

The Two Faces of Phase II Pricing, by G. J. McManus, Dec 9 p 39

What You Want isn't Always What You Get, by K. A. Kaufman and G. J. McManus, Dec 2 p 60

Proctor & Schwartz, Inc.

Order Surge Looms for Textile Machinery Makers, by K. W. Bennett, July 29 p 26

Production

The Adversary Complex Has Got to Go, by Gene Beaudet, July 29 p 5

Crystal Gazing: Manufacturing's Future, by D. N. Williams and W. G. Patton, July 1 p 41

How to Win Friends with and Influence Management, Oct 21 p 29

Lagging Economy Calls for the Whip, by G. J. McManus, Aug 19 p 39

Master Plan Develops Master Plant, by T. C. DuMond, Sept 16 p 84

Productivity is Key for Abel's Bodies, Oct 28 p 17

Productivity is Where the Heart Is, by Gene Beaudet, Sept 16 p 5

Productivity: Work Smarter, Not Faster, by T. H. Malim, Oct 7 p 57

Some Plants Never Fade Away, by J. J. Obrzut, July 8 p 50

Steel Talks: Power to the Man-hour? by G. J. McManus, July 15 p 41

There's More to It Than Productivity, July 22 p 5

Psychological Services of Pittsburgh

Losing Management Touch? Blame the Megrimms, by S. H. Hockenberry, Nov 18 p 49

Psychology

How to Spark Worker Groups to New Heights, July 1 p 25

If You Are an Up Man in a Down Job, Look Out!, July 8 p 27

Losing Management Touch? Blame the Megrimms, by S. H. Hockenberry, Nov 18 p 49

Must Boss Know All the Answers—And Say So? July 22 p 21

Puerto Rico

"Bargaining Fat" in Puerto Rico? by James Beizer, Oct 21 p 107

Purchasing

Is Inventory Spurt Now in Stock? Sept 30 p 33

Manage Your Output, Not Your Input, by D. N. Williams, Oct 14 p 44

Prices: What You Want isn't Always What You Get, by K. A. Kaufman and G. J. McManus, Dec 2 p 60

Purdue University

Who's in Charge When Computers Meet? by K. W. Bennett, Aug 12 p 60

Pyronics, Inc.

Product Liability: Let the Maker Beware, Nov 11 p 67

William M. Quackenbush

Losing Management Touch? Blame the Megrimms, by S. H. Hockenberry, Nov 18 p 49

Quality Control

Electrical Parts Given 'Withstandability' Ratings, by R. A. Wilson, Aug 12 p 77

Foundry Weighs its Hot Metal to Improve Quality, Oct 28 p 46

Is "No-Fault" Product Liability Coming? Sept 9 p 29
Japanese System Sparks Incentive, Aug 19 p 51
Product Liability: Let the Maker Beware, Nov 11 p 67

Quartz

'Dumb' Company Devises Quartz-to-Metal Seals, Sept 30 p 23

R

RST International Metals Ltd.

Prairie Looks at Copper's Future: Expensive, by James Beizer, Nov 4 p 85

Racine Federated Industries, Inc.

Drop-out Manager Drops Back in with a Crusher, Aug 19 p 37

Radial Lip Machine, Inc.

Holes: That's Where Your Money Goes, by B. D. Wakefield, July 22 p 43

Radio Corp. of America

A Bird? A Plane? No, Supercomputer, by K. W. Bennett, July 15 p 44
Boob Tube Biz Bofofs, by K. W. Bennett, July 8 p 39
Would You Believe a New Electronics Plant in Indiana? Oct 14 p 39

Railroads

Magnet Makers Magic Motors Make Money? by K. W. Bennett, Nov 25 p 59
UTU Backs Up Threat with Whip-saw Strikes, July 22 p 18

Rainville Co., Inc.

It's a Plastics World for Capital Spending, by K. W. Bennett, Nov 11 p 49

Ransburg-Electro-Coating Corp.

Make Room for Powder Coatings, by J. J. Obrzut, Sept 2 p 48

Ransome Co.

System Speeds Up Vertical Welding of Structures, Nov 18 p 31

Raytheon Corp.

Magnet Makers Magic Motors Make Money?, by K. W. Bennett, Nov 25 p 59

Recreational Vehicles

Drop-out Manager Drops Back in with a Crusher, Aug 19 p 37

Recruitment

Don't Curtail Recruiting Now, Aug 5 p 23
Executive Search Frustrates Top Brass, July 8 p 27
Fewer Managers are Pounding the Bricks, July 15 p 27
Has Industry-Campus War Lost its Bang?, by J. M. Beattie, Dec 2 p 58
Should Campus Recruiters Wear Riot Gear?, Nov 18 p 29

Reeves-Bowman Div.

System Holds Line to Tight Specs, by T. H. Malim, Oct 7 p 69
White Rust Controlled on Galvanized Steel, Nov 11 p 66

Refrigerators

Tomorrow's Growth Market, Refrigerators?, by K. W. Bennett, Oct 14 p 39

Republic Steel Corp.

Steel Begins to Lay Old Warriors to Rest, by G. J. McManus, Dec 16 p 64
Steel's Quarter was a Full Disaster, by G. J. McManus, Nov 4 p 47
That 'Blue Sky' on Steelmaking's Horizon, by G. J. McManus, Dec 2 p 65
Tough, Strong Steel Gets There in the As-Rolled Condition, Nov 11 p 68

Revere Copper & Brass, Inc.

Aluminum Industry Easing Out of Doldrums, by James Beizer, Nov 4 p 52

Reynolds Metals Co.

Aluminum Cutbacks Take Worker Toll, Nov 11 p 19
Justice Dept. Hits Reynolds in Antitrust Suit, by James Beizer, July 22 p 63
Latin Deposits: A Banker's Game, by James Beizer, Aug 19 p 38
Put Out the Garbage and Bring in a House? by J. M. Beattie, Nov 25 p 57

Rex Chainbelt, Inc.

Construction Rigs Bulling for '72 Power Upthrust, by K. W. Bennett, Nov 18 p 46

Rhodesia

Politics Kicks Around Chrome, by J. M. Beattie, Oct 28 p 33

Rivets

New Riveter Drives Rivets in Split Second, Nov 18 p 62

H. H. Robertson Co.

Industry: Bold Tip-Toe Through Maze II, Nov 18 p 43

Robinson Associates, Inc.

Recovery Revives Executive Hopscotch, by R. A. Wilson, Sept 16 p 61

Rohr Corp.

Industry's Quiet Rush to Silence, by J. E. Sandford, Dec 16 p 73
Phasedom Strikes Again—Now it's Systems, by R. A. Wilson, Dec 16 p 62
Transit Poker Draws a Card, by S. H. Hockenberry, Sept 23 p 41

Rollins-Purle

Must Small Plants Go Down the Drain?, by J. J. Obrzut, July 1 p 49

Rolling Mills

Alcan's Arvida Rolling Mill: The Envy of the Industry, by James Beizer, Sept 23 p 81
A Rolling Mill Gathers No Money in a Deep Freeze, by G. J. McManus, Nov 18 p 45

Rolls

Mergers: Profits are in the Giving, by G. J. McManus, July 22 p 38

Ross-Meehan Foundries

Must Small Plants Go Down the Drain?, by J. J. Obrzut, July 1 p 49

Rucker Phi Corp.

It's a Plastics World for Capital Spending, by K. W. Bennett, Nov 11 p 49

Rutgers University

Beryllium Not a Metal, July 15 p 29

Joseph T. Ryerson & Son, Inc.

Service Centers Bet on Tripled Business by 1980, Aug 12 p 61

S

SKF Industries, Inc.

Double Shell Makes the Most of Arc Furnace Power, Nov 18 p 61

Saco-Lowell Textile Machinery Group

Order Surge Looms for Textile Machine Makers, by K. W. Bennett, July 29 p 26

Safety

All About OSHA—or Don't Press Your Luck, by C. J. Suchocki, Dec 16 p 68
Can Detroit Weather Potomac Storm?, by D. N. Williams, July 29 p 25
A 'Crash' Program Under Way for New Bumpers, by W. G. Patton, Nov 4 p 60
Dummies Died—But Some Only Slightly—in GM Safety Car, by D. N. Williams, Nov 4 p 25
ESVs Could be ESP of Future Car Design, by D. N. Williams, Sept 30 p 19
GM is Out in Front with Bumpers that Bump, by D. N. Williams, Sept 9 p 25

Hazardous Products: Who Watches the Watchdog?, by K. A. Kaufman, July 29 p 17

Health and Safety Services Need

Personal Touch, Oct 28 p 17
Industry's Quiet Rush to Silence, by J. E. Sandford, Dec 16 p 73
OSHA Enforcement: You Haven't Seen Anything Yet, by K. A. Kaufman, Dec 23 p 21
Product Liability: Let the Maker Beware, Nov 11 p 67
Safety Air Bag Inflated, Deflated in Three-Way Clash, by D. N. Williams, Dec 23 p 31
Safety, Air Rules Affect Auto Materials Use, by D. N. Williams, Oct 28 p 19
Safety + Emission Rules = Orders for Suppliers? by D. N. Williams, July 15 p 25
What Happens when Safety Inspector Comes to Town? by B. D. Wakefield, Oct 14 p 38

St. Clair Rubber Co.

Patterns Find Coating in Urethane, Sept 9 p 70

St. Joe Mineral Corp.

Asarco—the Fly in the Lead-Price Ointment, by James Beizer, Dec 16 p 65

How to Beat the Metals Slump—or,

'Think Zinc', by James Beizer, Dec 23 p 51
Is Zinc Heading for Dual-Pricing System? by James Beizer, Oct 28 p 61
Mining in New York? It's Way Back, by James Beizer, Oct 7 p 119

St. Joseph Lead Co.

Lead Price Fluctuation: Much Ado About Nothing, by James Beizer, July 1 p 81

St. Louis Shipbuilding Federal

Barge, Inc.: Stainless Welding Shields Itself, by R. R. Irving, July 1 p 64

Samsonite Corp.

The Flexible Week is Becoming a Permanent Fixture, Nov 11 p 27

Sandvik Steel Corp.

Carbide Makers Get Hip with HIP, by R. A. Wilson, Sept 9 p 51

Satra Corp.

The Story Behind Mack Trucks and the Kama River, by R. A. Wilson and H. R. Neal, Dec 9 p 47
Will U.S. Let Mack Hack it in USSR? by R. A. Wilson, Aug 5 p 41

Donald E. Schwartz

Who Wears the Badge Around Here? by S. H. Hockenberry, Aug 12 p 65

Science & Technology

Materials: Stress Use, Not More R&D, by G. J. McManus, Nov 25 p 62
Mines Head Asks Industry Cooperation on Steel Research, Nov 18 p 61
Patent Rights: Search for a Better System, Sept 23 p 27
R&D Layoffs Cut Into Industry Muscle, by G. J. McManus, Oct 28 p 27
Why Pure Science Needs More Soul, July 22 p 21

Scientific Tube Co.

Thin-Wall Tubing Allures Steel-makers, by B. D. Wakefield, Sept 30 p 60

Scott Aviation Div.

Medical Hardware: Diagnosis Prosperity, by K. W. Bennett and C. J. Suchocki, Sept 2 p 32

Scrap—Ferrous Markets and Prices,

Weekly Tabulation

Scrap

'Clean Town' Cashes in on Daily Dirt, by R. A. Wilson, Sept 2 p 38
Demoralized Market Slips Another Notch, Nov 4 p 86

GM Casts In-Plant Scrap into In-Plant Steel, by W. G. Patton, Dec 9 p 53

It's Been a Long Season—but Wait

Until Next Year, Dec 23 p 52

Just How Low Are Scrap Prices?

Dec 2 p 84

Limited Mill Buys Bring About a

Price Drop, Oct 21 p 109

Low Activity Gives Market Bearish

Tone, Sept 23 p 82

Market Anemic with Mill Buys

Limited, Aug 12 p 111

Market Firmly Perched on Edge of

Nowhere, Sept 16 p 122

Market Firms a Bit, Although Ac-

tivity Lags, Sept 9 p 102

Market is Hanging in Suspended

Animation, Dec 9 p 80

Market Paralysis Starts Setting In,

July 29 p 45

Midwest Upsurge Makes Optimism

a Reality, Sept 2 p 62

NEP Myth: 'Too Early to Tell', by

K. W. Bennett, Aug 26 p 41

November Looks Like Cold, Bleak

Month for Market, Oct 28 p 62

OEP Takes Scrap Prices Out of

the Deep Freeze, Aug 26 p 67

Prices Erode Slowly: Supply Drops

Off, July 15 p 78

Price Freeze Puts Market in Con-

fusion, Aug 12 p 60

Prices Hold as Market Crawls Toward

Standstill, July 22 p 64

Prices Sag Off as Mill Buyers Call

the Tune, Oct 7 p 120

Quiet Market Waits—and Hopes

for an Upsurge, Oct 14 p 66

Recycling Could Upset Scrap In-

dustry, by G. J. McManus, July 1 p 39

Rigor Mortis is Infiltrating the

Market, Nov 18 p 90

Scrap Market Gets Ready to Go on

Vacation, July 8 p 78

Sudden Scrap Market Continues to

Wilt, July 1 p 82

Steel Settlement Doesn't Spark

the Market, Aug 5 p 68

Upsurge in Supply Could Weaken

Market, Sept 30 p 57

Will it be a Happy New Year for

Scrap? Nov 25 p 110

With Supply Up, Demand Down,

Market Dips Again, Nov 11 p 88

Would You Believe an Improve-

ment in Market? Dec 16 p 99

Sealed Power Corp.

Auto Prophecy: The Universal Engine, by D. N. Williams, Sept 2 p 39

Seals

'Dumb' Company Devises Quartz-to-Metal Seals, Sept 30 p 23

Security

Are Worker's Rights Only Part-Time? by S. H. Hockenberry, July 15 p 60

T. Sendzimer, Inc.

Carbide Makers Get Hip with HIP, by R. A. Wilson, Sept 9 p 51

Service Centers

Flame Cutting Warms Up to NC Tape, by J. E. Sanford, Aug 5 p 44

Phase II: Are its Clouds a

Shroud? by K. A. Kaufman, Nov 18 p 41

Service Centers Bet on Tripled

Business by 1980, Aug 12 p 61

A Small Service Center's Challenge,

by A. M. Greene, Aug 5 p 67

Steel Summary: An Exemption for

Service Centers? Oct 21 p 105

Shakeproof Div.

Holes: That's Where Your Money Goes, by B. D. Wakefield, Dec 22 p 43

Sharon Steel Corp.

Little Steel: Caught in Retroactivity Bind, Aug 26 p 19

Shearing

Computer Guides NC Punching, by T. H. Malim, Sept 23 p 58

Sheet (Metals)

Aluminum Shows Steel How to Get Flat Sheet, by T. C. DuMond, Dec 9 p 60

Shell Oil Co.:

Cutting Fluid Preservation Beats Dumping, by J. J. Obrzut, Dec 23 p 37

Shelley Systems Corp.:

Factory Housing: High Rising Sales, by K. W. Bennett, Aug 5 p 42

John Sheridan Associates, Inc.:

Are Front Offices Union-Growth Targets? Sept 30 p 15

Shipbuilders Council of America

U.S. Shipyards Turn the Corner, by B. D. Wakefield, Sept 16 p 77

Shipbuilding

Littion Launches its First Ship, by B. D. Wakefield, July 8 p 48
U.S. Shipyards Turn the Corner, by B. D. Wakefield, Sept 16 p 77

Signal Companies

The Story Behind Mack Trucks and the Kama River, by R. A. Wilson and H. R. Neal, Dec 9 p 47

Simonds Abrasives Div.:

Grinding Industry Turns to Alloyed Abrasive, by J. J. Obrzut, Oct 28 p 48

Singer Co.:

NC Lathe Paces Upturn of Profits, by J. E. Sandford, Dec 23 p 43

Small Business Administration

SBA Carries Water for Those Who Won't Drink, by S. H. Hockenberry, Nov 25 p 65

Smelting

Japanese Set Up to Score Major Copper Goal, Nov 18 p 47

A. O. Smith Corp.:

Ceramic Cocoon Blocks Metal Oxidation, by B. D. Wakefield, July 8 p 52

Ecology: After Lacing Industry EPA Cracks its Whip at Cities, by K. W. Bennett, Oct 21 p 62

David Smith Steel Co.:

Service Centers Bet on Tripled Business by 1980, Aug 12 p 61

Smogless Automobile Assn.:

Hydrogen-Powered Car is Smog-Free but Not Trouble-Free, by T. H. Malin, Oct 14 p 55

Society of Aerospace Materials & Process Engineers

Is Space Shuttle an Industry's Ride to Recovery? Oct 14 p 27

Society of Manufacturing Engineers

Are Worker's Rights Only Part-Time? by S. H. Hockenberry, July 15 p 50

What Happens when Safety Inspector Comes to Town? by B. D. Wakefield, Oct 14 p 38

Society of the Plastics Industry, Inc.:

Plastics Show Set for Chicago, Oct 21 p 85

Sociology

New Ideas to Solve Some New Problems, Nov 18 p 29

Technology: It's Great — for Things, Not People, by S. E. Lehman, July 22 p 36

Who Opened That Window in the Board Room? Nov 25 p 27

Will Consultants be Social Ombudsmen? Sept 2 p 24

You've Come a Long Way, Baby — In Some Ways! Aug 12 p 27

Somma Tool Co.:

Heat-Treat Rules: Time for Change? by T. H. Malin, Aug 26 p 57

Sony Corp. of America

Now Introducing: Made in Japan (U.S.A.), Dec 16 p 65

South America

Latin Deposits: A Banker's Game, by James Beiser, Aug 19 p 38
Muscle from Mexico—and it's Steel Not Tijuana Brass, by Gene Beaudet, Oct 14 p 40

South Bend Lathe

EDM-Winging Well Without Aerospace, by K. W. Bennett, Dec 2 p 53

Spacerays Inc.:

There's More of Lasers than Light, by J. E. Sandford, Oct 14 p 49

Sperry Rand Corp.:

Big, Big Computer for Inventory Woes, by K. W. Bennett, Oct 7 p 51

Sporting Equipment

Steels Suit Golf Clubs to a Tee, by T. C. DuMond, Aug 5 p 51

Stainless Steel

'Argon-Oxygen' Brings New Life to Stainless, by R. R. Irving, Nov 11 p 61

Cyclops Introduces Electron Beam Stainless, by G. J. McManus, Nov 25 p 62

High-Speed Pulsating Welding Unit Jumps Mill Output of Stainless Tubing, by B. D. Wakefield, Dec 2 p 72

Plasma Cutting Takes on Steel, by R. R. Irving, Aug 26 p 52

Refining Method Affects Machinability, July 8 p 47

Stainless Welding Shields Itself, by R. R. Irving, July 1 p 54

Standard Alliance Industries, Inc.:

Is this Industry Forging Ahead—or Behind? by J. M. Beattie, Dec 2 p 59

Profit Plans: They Gotta Have Heart, by J. D. Baxter, Sept 16 p 71

Standard Pressed Steel Co.:

Holes: That's Where Your Money Goes, by B. D. Wakefield, July 22 p 43

Test the Assembly, Not the Fasteners, Nov 4 p 66

Standards

All About OSHA—or Don't Press Your Luck, by C. J. Suchocki, Dec 16 p 68

'An Oil Gage is an Oil Gage' by D. N. Williams, Aug 26 p 23

Conversion to Metrics: Costly and Confusing, by K. A. Kaufman, Aug 5 p 45

Detroit's New 'Mixtrics' is Not All Feet, by D. N. Williams, Oct 7 p 25

Fasteners Start Switch to Metric, by R. R. Irving, Aug 5 p 55

Industry's Quiet Rush to Silence, by J. E. Sandford, Dec 16 p 73

Standards Urged for Sports Equipment, July 22 p 23

Why Are there So Many Fasteners? by H. H. Cunningham, Aug 19 p 44

Stanford University

Should Campus Recruiters Wear Riot Gear? Nov 18 p 29

Stearns Electric Corp.:

Diversifying: Everybody Into the Act, by K. W. Bennett, July 29 p 29

Steel

Aluminum Shows Steel How to Get Flat Sheet, by T. C. DuMond, Dec 9 p 60

Can a New Bearing Alloy Replace 52100 Steel? Aug 26 p 59

Inland Sinks Post-Contract Steel Hike, by G. J. McManus, July 1 p 40

Is Inventory Spurt Now in Stock? Sept 30 p 33

Japan Holding Back on Steel Exports: Declines Jet Deal, Dec 2 p 22

Japanese Open Door for New Steel Quota Plan, by K. A. Kaufman, Sept 9 p 52

Japanese Steel Producer Wars with HSC Over Steel Orders, Dec 16 p 27

Lackawanna: To be or Not to Be? by Scott Hayden, Dec 2 p 66

Lower Cost Alloy for Bearings, July 29 p 19

Mines Head Asks Industry Cooperation on Steel Research, Nov 18 p 61

Music from Mexico—and it's Steel Not Tijuana Brass, by Gene Beaudet, Oct 14 p 40

Needed: The Right Alloys to Tame Automobile Exhaust Emissions, by W. G. Patton, Sept 30 p 44

Oxygen Steel Suits Continue, Nov 4 p 13

Plasma Cutting Takes on Steel, by R. R. Irving, Aug 26 p 52

Programmed Analyzer Classifies Steel Inclusion Count, Dec 23 p 44

Service Centers Bet on Tripled Business by 1980, Aug 12 p 61

Steel Sandwich Resists Pitting Corrosion, Nov 4 p 31

Steel Summary: New Variables Cloud Steel Talks, July 1 p 73

Steel Summary: Price Test Still in the Future, Aug 12 p 107

Steel Summary: Record Imports Cast Dark Shadow, Aug 5 p 65

Steel Summary: Western States Stage Comeback, July 8 p 75

Tough, Strong Steel Gets There in the As-Rolled Condition, Nov 11 p 68

White Rust Controlled on Galvanized Steel, Nov 11 p 66

Steel Co., of Canada, Ltd.:

Gas Pipeline Challenges the Elements, by B. D. Wakefield, Nov 25 p 71

That 'Blue Sky' on Steelmaking's Horizon, by G. J. McManus, Dec 2 p 65

U. S. Trade Whistle Deafens World Steel, by G. J. McManus, Oct 21 p 57

Steel Industry

Business Decides to Slug it Out with Dissenters, Dec 2 p 29

Dollar Float Stalls Steel Importers, by K. W. Bennett, Oct 28 p 29

Economy: No Relief and No Hope? by G. J. McManus, Aug 12 p 57

Fed Wage Control: Management's Wary, by G. J. McManus, July 15 p 46

Hartke Pressure for Voluntary Import Limits, by K. A. Kaufman, Aug 5 p 43

Has Industry-Campus War Lost its Bang? by J. M. Beattie, Dec 2 p 58

Is Inventory Spurt Now in Stock? Sept 30 p 33

Lagging Economy Calls for the Whip, by G. J. McManus, Aug 19 p 39

The Last Gasp of a Cycle . . . Hopefully, by Gene Beaudet, Aug 12 p 5

Little Steel: Caught in Retroactivity Bind, Aug 26 p 19

Little Steel Moves Into the Big Time, by K. W. Bennett, Sept 2 p 37

Mergers: Profits are in the Giving, by G. J. McManus, July 22 p 38

Mill Equipment: Color it Black with Gray Streaks, by G. J. McManus, Oct 7 p 53

Mills Think Market Will Sustain Approved Price Hikes, by G. J. McManus, Dec 16 p 61

NEP: Is More Tax Relief in the Cards? by K. A. Kaufman, Sept 2 p 36

Pollution Abroad: Fined First, Explain Later, by J. M. Beattie, Oct 28 p 30

Prices: What You Want isn't Always What You Get, by K. A. Kaufman, and G. J. McManus, Dec 2 p 60

Quotas, Yes; Surtax, No, Oct 21 p 105

Recycling Could Upset Scrap Industry, by G. J. McManus, July 1 p 39

Steel Accord: Will Nixon Send 'Thank You' Note? Aug 19 p 15

Steel Begins to Lay Old Warriors to Rest, by G. J. McManus, Dec 16 p 64

Steel Cartel Breaks over Japan Horizon, Nov 18 p 27

Steel Pact: Now the Hangover Begins, by G. J. McManus and K. A. Kaufman, Aug 5 p 39

Steel Summary: An Exemption for Service Centers? Oct 21 p 105

Steel Summary: Are Things Really Looking Up? Nov 25 p 107

Steel Summary: Climbing Back Up Onto the Plateau, Dec 16 p 95

Steel Summary: Cloud of Confusion Hangs Over Price, Aug 26 p 65

Steel Summary: Coming on Strong by End of the Year? Sept 2 p 59

Steel Summary: Drastic Stock Cutting After Aug 1, July 22 p 61

Steel Summary: Dreary August is the Prospect, July 15 p 75

Steel Summary: Everyone's Watching the New Cars, Sept 16 p 119

Steel Summary: Footing Firms for Long-Term Growth, Sept 9 p 99

Steel Summary: Forget August and September, July 29 p 44

Steel Summary: A Hard Line on Import Quota Talks, Sept 23 p 79

Steel Summary: Higher Prices Slow to Show, Dec 9 p 77

Steel Summary: Import Accord by Christmas? Dec 23 p 49

Steel Summary: Look for a January Recovery, Oct 28 p 59

Steel Summary: Looking Past October to November, Sept 30 p 54

Steel Summary: Price Test Still in the Future, Aug 12 p 107

Steel Summary: Producers Caught in Market Vacuum, Aug 19 p 68

Steel Summary: Quick Test for Price Guidelines? Nov 11 p 85

Steel Summary: Record Imports Cast Dark Shadow, Aug 5 p 65

Steel Summary: Slow, So Slow an Improvement, Oct 14 p 63

Steel Summary: Still Waiting for the Orders, Nov 18 p 87

Steel Summary: Uncertainty Holds Recovery Back, Nov 4 p 83

Steel Summary: Where are All the Orders? Oct 7 p 117

Steel Summary: Will Price Hikes Start a Scramble? Dec 2 p 81

Steel Talks: Along Came Nixon, by K. A. Kaufman, July 8 p 37

Steel Talks: Local Strike Power Loses Steam, July 8 p 19

Steel Talks: Power to the Man-hour? by G. J. McManus, July 15 p 41

Steel vs. USWA: An Impossible Mix, by G. J. McManus, July 29 p 23

Steel's Quarter was a Full Disaster, by G. J. McManus, Nov 4 p 47

Strike Snags Plague Little Steel, Oct 7 p 21

There's More to it Than Productivity, July 22 p 5

U. S. Trade Whistle Deafens World Steel, by G. J. McManus, Oct 21 p 57

Was Steel's Struggle in the Wage-Price Web Turning Point Toward New Economy? by G. J. McManus, Sept 9 p 55

Who's in Charge When Computers Meet? by K. W. Bennett, Aug 12 p 60

Steelmaking

'Argon-Oxygen' Brings New Life to Stainless, by R. R. Irving, Nov 11 p 61

Ford's Newest Idea: A Bigger Hot-Strip Mill, by G. J. McManus, July 22 p 33

GM Casts In-Plant Scrap Into In-Plant Steel, by W. G. Patton, Dec 9 p 53

Holding Furnace Keeps Heat on Molten Metal, by G. J. McManus, Nov 25 p 78

Irvin Plant Expansion Pumps Up Cold-Rolled Sheet Output, Dec 2 p 13

Mill Melts Almost 150 Alloys, by N. B. Schwartz, July 15 p 64

Mines Head Asks Industry Cooperation on Steel Research, Nov 18 p 61

Q-BOP: The New Big Bopper in Steelmaking? by G. J. McManus, Dec 23 p 28
Russian ESR Technology is "Heavy", by N. B. Schwartz, July 8 p 46
Steelmaking Process Converts Machine Turnings into Bars, Dec 2 p 31
That 'Blue Sky' on Steelmaking's Horizon, by G. J. McManus, Dec 2 p 65

Steel Service Center Institute

Service Centers Bet on Tripled Business by 1980, Aug 12 p 61
Steel Summary: An Exemption for Service Centers? Oct 21 p 106

Steel Summary—Weekly Appraisal of Marketing and Production

Stellite Div.:

'Argon-Oxygen' Brings New Life to Stainless, by R. R. Irving, Nov 11 p 61
Powder Metallurgy: A Sleeping Giant, Oct 7 p 63

Sterling-Detroit Co.:

Best Seller '72: 'Run, Robet, Run', by K. W. Bennett, Dec 23 p 26

Sterling-Homex Corp.:

Factory Housing: High Rising Sales, by K. W. Bennett, Aug 5 p 42

Robney B. Stevens

How Good a Plant Manager Are You? Aug 5 p 48

Stora Kopparbergers Bergslags AB (Sweden)

Pollution Abroad: Fined First, Explain Later, by J. M. Beattie, Oct 28 p 33

Strip Mills

Ford's Newest Idea: A Bigger Hot-strip Mill, by G. J. McManus, July 22 p 33

Strippit Div.:

Machine Tool Orders Up—with "Hope", by R. A. Wilson, Sept 30 p 35

Charles Stuart Associates, Inc.:

Recovery Revives Executive Hopscotch, by R. A. Wilson, Sept 16 p 61

Superior Plating Co., Inc.:

Adhesive Bonding Holds Plated Strip to Cast Iron Ways, by T. H. Malim, Oct 21 p 78

Swanson-Erie Corp.:

Assembly Machines Push Up Stream, by R. A. Wilson, Aug 12 p 59

Sweden

Double Shell Makes the Most of Arc Furnace Power, Nov 18 p 61
Infra-Red Checks Downtime, Sept 16 p 82

Swift Industries, Inc.:

Factory Housing: High Rising Sales, by K. W. Bennett, Aug 5 p 42

Swindell-Dressler Co.:

HvL is Going Strong South of the Border, by G. J. McManus, Nov 18 p 58
Kama River Capers: Scene Three, by R. A. Wilson and K. A. Kaufman, Aug 19 p 32
That 'Blue Sky' on Steelmaking's Horizon, by G. J. McManus, Dec 2 p 65

Sylvania Electric Products, Inc.:

Boob Tube Biz Boffos, by K. W. Bennett, July 8 p 39

Syracuse University

Powder Metallurgy: A Sleeping Giant, Oct 7 p 63

Systemation Inc.:

There's More to Lasers than Light, by J. E. Sandford, Oct 14 p 49

T

TRW, Inc.:

Aerospace Forgers Find Commercial Road Narrow, by R. A. Wilson, July 8 p 36

Tail Pipes

Master Plan Develops Master Plant, by T. C. DuMond, Sept 16 p 84

Taxes

ADR Wins Final Approval with Few Major Changes, by K. A. Kaufman, July 1 p 41
Compromise, Troika-Type Board Seen in Phase II, by K. A. Kaufman, Sept 23 p 44
Government Made a Friend—Business, by K. A. Kaufman, Aug 26 p 46
Investment Credit, Fast Write-Offs Get Senate Nod, by K. A. Kaufman, Nov 4 p 48
Is Mr. Nixon the Only One Who's Changed? by Gene Beaudet, Sept 30 p 5
NEP: Is More Tax Relief in the Cards? by K. A. Kaufman, Sept 2 p 36
Nader and Common Cause: Stamp Out Fast Write Offs, by K. A. Kaufman, July 15 p 23
Nixon Pressured to Make Incomes Policy Moves, by K. A. Kaufman, July 1 p 38
Optimism Grows for NEP's Inflation-Cutting Impact, by K. A. Kaufman, Sept 9 p 23
Q & A on the Big Giveaway, by Gene Beaudet, Sept 9 p 5
Tax Credit: Just About in the Bag, by K. A. Kaufman, Dec 9 p 21
Tax Credit: A Spending Springboard? Sept 9 p 49
Treasury Rescues Quick Write-Offs from Mills Act, by K. A. Kaufman, Sept 30 p 37
Up There, Where the Air is Rare—It's Expensive, by K. A. Kaufman, July 22 p 19
Why Did This Have to Take Three Months? by Gene Beaudet, Dec 16 p 5
You Can't Have Your Political Cake and Tax Credit—Maybe, by K. A. Kaufman, Dec 2 p 23

Tayco Development Co.:

A 'Crash' Program Under Way for New Bumpers, by W. G. Patton, Nov 4 p 60

Taylor Devices, Inc.:

A 'Crash' Program Under Way for New Bumpers, by W. G. Patton, Nov 4 p 60

Taylor Forge Div.:

Gas Pipeline Challenges the Elements, by B. D. Wakefield, Nov 25 p 71

Techfront—Weekly Analysis of New Developments in the Metalworking and Related Industries

Technology

Diversifying: Everybody Into the Act, by K. W. Bennett, July 29 p 29
Innovation: Who You Ask Decides What You'll Get, by D. N. Williams, Oct 7 p 49
Is Bendix Laughing All the Way to Technology Bank? by D. N. Williams, Dec 9 p 23
Technology Bank Draws Interest, by T. C. DuMond, July 29 p 39
Technology: It's Great—for Things, Not People, by S. E. Lehman, July 22 p 36
That 'Blue Sky' on Steelmaking's Horizon, by G. J. McManus, Dec 2 p 65
Why Pure Science Needs More Soul, July 29 p 21

Techware Computing Corp.:

Computer Guides NC Punching, by T. H. Malim, Sept 23 p 58

Tek Tran

Technology Bank Draws Interest, by T. C. DuMond, July 29 p 39

Teledyne Co.:

Assembly Machines Push Up Stream, by R. A. Wilson, Aug 12 p 59

Television

Boob Tube Biz Boffos, by K. W. Bennett, July 8 p 39
Now Introducing: Made in Japan (U.S.A.), Dec 16 p 65

Tellus, A. G.

Chlorination Increases Usable Metals Resources, Sept 16 p 29

Tenneco Inc.:

Industry Gets Together on Floating Power Stations, Aug 26 p 27

Testing & Inspection

Charpy Learns a Lot of New Tricks, by T. H. Malim, Nov 25 p 76
Infra-Red Checks Downtime, Sept 16 p 82
Optical Gaging Speeds Design Time on New Products, by T. H. Malim, Dec 9 p 59
Programmed Analyzer Classifies Steel Inclusion Count, Dec 23 p 44
Technology Bank Draws Interest, by T. C. DuMond, July 29 p 39
Test the Assembly, Not the Fastener, Nov 4 p 66
X-Ray System Makes Use of Paper Instead of Film, Oct 28 p 21

Texas Instruments, Inc.:

Computer Takes Heat Off Melt Shop, by B. D. Wakefield, Sept 23 p 60
Medical Hardware: Diagnosis Prosperity, by K. W. Bennett and C. J. Suchocki, Sept 2 p 32

Textile Machinery

Order Surge Looms for Textile Machinery Makers, by K. W. Bennett, July 29 p 26

Textron, Inc.:

Surviving the Electronic Deluge, by J. E. Sandford, Nov 11 p 67

Thermal Dynamics Corp.:

Plasma Cutting Takes on Steel, by R. R. Irving, Aug 26 p 52

3M Co.:

'Fuxxy' Deburs the Inaccessible, by B. D. Wakefield, Aug 12 p 78

August-Thyssen-Hütte, AG

U. S. Trade Whistle Lsafens World Steel, by G. J. McManus, Oct 21 p 57

Time Saver Tools, Inc.:

Holes: That's Where Your Money Goes, by B. D. Wakefield, July 22 p 43

Timken Roller Bearing Co.:

Can a New Bearing Alloy Replace 52100 Steel? Aug 26 p 59
Competitive Race Proves Too Much for Federal's Bearings, by D. N. Williams, Nov 4 p 63
Lower Cost Alloy for Bearings, July 29 p 19

Titanium

Now, Titanium Parts from Powder, by T. H. Malim, Nov 18 p 60
Titanium Joints Join Production Ranks, by T. H. Malim, July 22 p 47

Tool and Die Industry

Tool, Die Industry Blasts Senate Sale Bill, by K. A. Kaufman, Oct 21 p 23

Tool-Die Makers Look at Kama River—and Beyond, Dec 2 p 13
Tool-Die Shops 'Realistic' Pact, Aug 19 p 15

Tool Steel

Heat-Treat Rules: Time for Change? by T. H. Malim, Aug 26 p 57
Tool Steels Take the ESR Road, by G. J. McManus, Sept 23 p 55

Torrington Co.:

Europe, Imports Appeal Starts to Fade, Aug 26 p 46

Toshiba America, Inc.:

Boob Tube Biz Boffos, by K. W. Bennett, July 8 p 39

Towers, Perrin, Foster & Crosby

How Many Lineup Changes When You Go Global? Oct 7 p 29
The New Crusade: Effective Manpower Planning, Dec 9 p 25

Townland Corp.:

Factory Housing: High Rising Sales, by K. W. Bennett, Aug 5 p 42

Training Programs

Business Gun Opens Fire on Critics, July 1 p 25
Must Boss Know All the Answers—And Say So? July 22 p 21
"Second Chance" Training at 3 Ford Plants, Sept 9 p 21
Training Schools: End or Means to an End? Oct 21 p 29
Where Have All the Promises Gone? by S. H. Hockenberry, July 8 p 42

Transportation

Mass Transit Mess: There's a Market Here Somewhere, by D. N. Williams, Nov 25 p 23
Transit Poker Draws a Card, by S. H. Hockenberry, Sept 23 p 41
UTU Sets "Whipsaw" Strikes for July 16, July 8 p 19

Travcom, Inc.:

A Bird? A Plane? No, Supercomputer!, by K. W. Bennett, July 15 p 44

Trucks

Is a Turbine Battle Shaping Up? by D. N. Williams, Sept 2 p 35
The Story Behind Mack Trucks and the Kama River, by R. A. Wilson and H. R. Neal, Dec 9 p 47
Who Knifed Mack Out of the Kama Plant? by R. A. Wilson, Sept 23 p 47

True Temper Corp.:

Steels Suit Golf Clubs to a Tee, by T. C. DuMond, Aug 5 p 51

True-Trace Div.:

Surviving the Electronic Deluge, by J. E. Sandford, Nov 11 p 67

Tubing

High-Speed Pulsating Welding Unit Jumps Mill Output of Stainless Tubing, by B. D. Wakefield, Dec 2 p 72
High Speed Welding Builds Tapered Tubes Into Light Poles, by B. D. Wakefield, Oct 28 p 61
Master Plan Develops Master Plant, by T. C. DuMond, Sept 16 p 84
Teflon for Heat Exchanger Tubing? by J. J. Obratz, Sept 9 p 65
Thin-Wall Tubing Allures Steelmakers, by R. D. Wakefield, Sept 30 p 63

Tufts New England Medical Center

Losing Management Touch? Blame the Megrimis, by S. H. Hockenberry, Nov 18 p 49

Turek & Heller Machine, Inc.:

High-Speed Pulsating Welding Unit Jumps Mill Output of Stainless Tubing, by B. D. Wakefield, Dec 2 p 72

U

USI-Clearing
Hybrid Line Cuts Trapezoids, Oct 28 p 47

USM Corp.:
Urethanes Foam into Injection Molding, by T. H. Mallin, Dec 23 p 40

U.S.S.R.
Big Jump in Russian Trade Stalled Until Nixon Visit, by K. A. Kaufman, Nov 25 p 56
Is America Getting Red Carpet Treatment? by R. A. Wilson and G. J. McManus, Dec 9 p 42
Kama River Caper: Scene Three, by R. A. Wilson and K. A. Kaufman, Aug 19 p 32
MT Mission to Moscow: Great Success, by K. W. Bennett, July 1 p 35
Mr. 'Mack' Knives through Kama River Fog, by J. E. Sandford, Nov 18 p 44
Pack Up the Rubles in Your Old Kit Bag . . . July 1 p 37
The Story Behind Mack Trucks and the Kama River, by R. A. Wilson and H. R. Neal, Dec 9 p 47
Thin-Wall Tubing Allures Steelmakers, by B. D. Wakefield, Sept 30 p 50
Tool-Die Makers Look at Kama River—and Beyond, Dec 2 p 13
U.S.S.R. Oil Leak: A Warning to Alaska's Pipeliners? by I. G. Black, July 8 p 41
Was Mack Sold Down the Kama River? by R. A. Wilson, Nov 4 p 49
What's in Russia's Bag of Exports? by J. M. Beattie, Dec 9 p 42
Who Knifed Mack Out of the Kama Plant? by R. A. Wilson, Sept 23 p 23
Will U.S. Let Mack Hack it in USSR? by R. A. Wilson, Aug 5 p 41

U.S. Army Materials and Mechanics Research Center
Powder Metallurgy: A Sleeping Giant, Oct 7 p 63

U.S. Army Missile Command
Plastic Missile Fired Successfully, Dec 9 p 27

U.S. Bureau of Mines
Mines Head Asks Industry Cooperation on Steel Research, Nov 18 p 61

U.S. Department of Commerce
After the 90-Day Freeze—NEP, Phase Two, by K. A. Kaufman, Sept 2 p 22
Big Jump in Russian Trade Stalled Until Nixon Visit, by K. A. Kaufman, Nov 25 p 56
Pack Up the Rubles in Your Old Kit Bag . . . July 1 p 37
Trade Aid: Fed Hints at Easing Antitrust Laws, by K. A. Kaufman, Aug 5 p 19

U.S. Department of Housing and Urban Development
Factory Housing: High Rising Sales, by K. W. Bennett, Aug 5 p 42
Modular Homes: A Gold Mine or Land Mine? by K. W. Bennett, Nov 11 p 54

U.S. Department of Labor
Is Labor on its Last Ego Trip? by G. J. McManus, July 22 p 31
Labor Talks Flow Despite Freeze, by G. J. McManus, Sept 30 p 39
OSHA Enforcement: You Haven't Seen Anything Yet, by K. A. Kaufman, Dec 23 p 21

U.S. Department of Transportation
Transit Poker Draws a Crowd, by S. H. Hockenberry, Sept 23 p 41

U.S. Golf Assn.:
Steels Suit Golf Clubs to a Tee, by T. C. DuMond, Aug 5 p 51

U.S. Industries, Inc.:
Assembly Machines Push Up Stream, by R. A. Wilson, Aug 12 p 59

U.S. Pipe and Foundry Co.:
Optical Reader Breaks Computer Logjam, July 15 p 60

U.S. Steel Corp.:
Business Decides to Slug it Out with Dissenters, Dec 2 p 29
Coal User's Dirge: Boyle Fiddles, but What's Left to Burn? by G. J. McManus, Nov 11 p 52
Economy: No Relief and No Hope? by G. J. McManus, Aug 12 p 57
Factory Housing: High Rising Sales, by K. W. Bennett, Aug 5 p 42
Gas Pipeline Challenges the Elements, by B. D. Wakefield, Nov 25 p 71
Irvin Plant Expansion Pumps Up Cold-Rolled Sheet Output, Dec 2 p 13
Is America Getting Red Carpet Treatment? by R. A. Wilson and G. J. McManus, Dec 9 p 42
Modular Homes: A Gold Mine or Land Mine? by K. W. Bennett, Nov 11 p 54
The Price Commission with a Credibility Gap? by K. A. Kaufman, Dec 16 p 61
Q-BOP: The New Big Bopper in Steelmaking? by G. J. McManus, Dec 23 p 28
R&D Layoff Cut Into Industry Muscle, by G. J. McManus, Oct 28 p 27
Recycling Could Upset Scrap Industry, by G. J. McManus, July 1 p 39
Steel Begins to Lay Old Warriors to Rest, by G. J. McManus, Dec 16 p 64
Steel Pact: Now the Hangover Begins, by G. J. McManus and K. A. Kaufman, Aug 5 p 39
Steel vs USWA: An Impossible Mix, by G. J. McManus, July 29 p 23
That 'Blue Sky' on Steelmaking's Horizon, by G. J. McManus, Dec 2 p 65
Was Steel's Struggle in the Wage-Price Web Turning Point Toward New 'Economy'? by G. J. McManus, Sept 9 p 55
Will Union Control Rest in Hands of the Public? Oct 21 p 21
Wire Takes Pressure from Gas Storage Tanks, Dec 23 p 24

Ultrasonics
Engineering Plastics: The Pressure is On, by T. C. DuMond, Oct 21 p 71

Unimation, Inc.:
Best Seller '72: 'Run, Robot, Run', by K. W. Bennett, Dec 23 p 26
Europe, Imports Appeal Starts to Fade, Aug 26 p 46

Union Carbide Corp.:
'Argon-Oxygen' Brings New Life to Stainless, by R. R. Irving, Nov 11 p 61
Ecology: After Lacing Industry EPA Cracks its Whip at Cities, by K. W. Bennett, Oct 21 p 62
Flame Cutting Warms Up to NC Tape, by J. E. Sandford, Aug 5 p 44
Plasma Cutting Takes on Steel, by R. R. Irving, Aug 26 p 52
R&D Layoff Cut Into Industry Muscle, by G. J. McManus, Oct 28 p 27
Refining Method Affects Machinability, July 8 p 47
That 'Blue Sky' on Steelmaking's Horizon, by G. J. McManus, Dec 2 p 65

Union of South Africa
Steelmaking Process Converts Machine Turnings into Bars, Dec 2 p 31

United Aircraft Corp.:
That Little Black Box in the Closet is a Slow Corner, by K. W. Bennett, Dec 9 p 45
There's More to Lavers than Light, by J. E. Sandford, Oct 14 p 49

United Auto Workers
Aero Bargainers Fly Unfriendly Skies, Dec 9 p 19
Aeroworkers Await Word: PB Sets Exception Rules, Dec 23 p 18
The Flexible Week is Becoming a Permanent Fixture, Nov 11 p 27

Labor Wants a Thaw: Says Freeze is Unfair, Sept 9 p 21
Labor Wins a Voice in Planning NEP, Part II, Sept 2 p 21
Nixon's Game Plan: From Slow to Stop, by K. A. Kaufman, Aug 19 p 35
Payboard Meets its First Test—Mineworkers, Oct 21 p 21
"Second Chance" Training at 3 Ford Plants, Sept 9 p 21
Short Workweek Has Short Life at Chrysler, Dec 23 p 18
UAW Blasts Triennial Local Talks at GM, Nov 18 p 21
UAW Gets Cold Shoulder from Wage Freezers, Oct 7 p 21
UAW Looks for Good Way to Skate Around Freeze, Oct 14 p 17
UAW Takes Wraps Off Aerospace Bargaining, Aug 5 p 18

United Kingdom
In Whatever Language a Strike is Still a Strike, Dec 2 p 27
Laborite Leaders Veto Market Entry, Aug 5 p 21

United Mineworkers of America
Coal Strike Kindles Smoldering Industry Ire, Oct 28 p 31
Coal User's Dirge: Boyle Fiddles, but What's Left to Burn? by G. J. McManus, Nov 11 p 52
King Coal to Nixon: Sorry, Old Soul, Oct 7 p 47
Labor Talks Flow Despite Freeze, by G. J. McManus, Sept 30 p 39
Mineworkers' Talks Hint at Peaceful Accord, Sept 23 p 21
Nervous Nixon Watches Mine, Maritime Talks, Sept 30 p 15
UMW Accord Provides Key Test of Control Concept, Nov 18 p 21
UMW's Boyle: Troubled by Venley's Confession, July 1 p 19

United Steelworkers of America
Copper Strike Has Silver Lining, by James Beizer, July 8 p 40
Fed Wage Control: Management's Wary, by G. J. McManus, July 15 p 46
Is Labor on its Last Ego Trip? by G. J. McManus, July 22 p 31
Labor Talks Flow Despite Freeze, by G. J. McManus, Sept 30 p 39
Pav Board: Abel, Hodgson and More Fat Cats to Come, Dec 16 p 21
Productivity is Key for Abel's Bodies, Oct 28 p 17
Steel Accord: Will Nixon Send 'Thank You' Note? Aug 19 p 15
Steel Pact: Now the Hangover Begins, by G. J. McManus and K. A. Kaufman, Aug 5 p 39
Steel Talks: Along Came Nixon, by K. A. Kaufman, July 8 p 37
Steel Talks: Local Strike Power Loses Steam, July 8 p 19
Steel Talks: Power to the Manhour? by G. J. McManus, July 15 p 41
Steel vs USWA: An Impossible Mix, by G. J. McManus, July 29 p 23
Was Steel's Struggle in the Wage-Price Web Turning Point Toward New Economy? by G. J. McManus, Sept 9 p 55

United Transportation Union
UTU Racks Up Threat with Whip-saw Strikes, July 22 p 18
UTU OK's Rule Changes, Ends Whip-saw Strikes, Aug 5 p 18
UTU Sets "Whipsaw" Strikes for July 16, July 8 p 19

Univac Div.:
Big Computer for Inventory Woes, by K. W. Bennett, Oct 7 p 51

Universal-Cyclops Specialty Steel Div.:
Cyclops Introduces Electron Beam Stainless, by G. J. McManus, Nov 25 p 62

Universal Drafting Machine Corp.:
Modular Drafting System Advances by Application Tiers, by R. A. Wilson, Nov 25 p 77

University Computing Co.:
A Bird? A Plane? No, Supercomputer! by K. W. Bennett, July 15 p 44

University of Chicago
About '72—Optimism is Busting Out, by K. W. Bennett, Dec 16 p 59

University of Concepcion (Chile)
Copper is Metals' Newest Pauper, by James Beizer, Dec 23 p 29

University of Guanajuato (Mexico)
The UG Process May Ease Problems Involving Bauxite, Oct 14 p 56

University of Hawaii
Decision-Making: Why Egghead Approaches Bomb Out, Dec 16 p 29

University of Michigan
Auto Headache No. '72: Emissions and Imports, by D. N. Williams, Sept 16 p 23
Automakers Become Doubting Thomases, Nov 11 p 53
Economic Computers Don't Agree on Freeze's Effects, by D. N. Williams and P. J. Cathey, Sept 16 p 65
How to Spark Worker Groups to New Heights, July 1 p 25
Let's Get Those Goals Really Integrated, July 15 p 27
Must Boss Know All the Answers—And Say So? July 22 p 21
Only a Domestic Upheaval Bars China's Trade Growth, Nov 11 p 25
Phase II: Handed for Trouble, Oct 7 p 47
Phase II's Go or No-Go Prospects Rated, by D. N. Williams, Nov 25 p 68
Simple Life No Match for Work Ethic, Oct 21 p 21

University of Pennsylvania
Economic Computers Don't Agree on Freeze's Effects, by D. N. Williams and P. J. Cathey, Sept 16 p 65
'Things Aren't Bad Enough Yet', by S. H. Hockenberry, Aug 26 p 49

University of Pittsburgh
Now—Make Way for the Business Activist, Aug 5 p 23

University of Southern California
Measuring the Methods to Measure Air Pollution, Sept 9 p 31

University of Utah
Manage Your Output, Not Your Input, by D. N. Williams, Oct 14 p 44

University of Wisconsin
Industry's Quiet Rush to Silence, by J. E. Sandford, Dec 16 p 73

Urban Mass Transportation Administration
Transit Poker Draws a Crowd, by S. H. Hockenberry, Sept 23 p 41

Urwick, Currie & Partners (Toronto)
Copper: Measuring High Cost at 50 Cents a Lb, by James Beizer, Oct 21 p 107

Used Machinery—Clearing House for Variety of Not-So New Equipment

V

Vacuum Industries, Inc.:
Titanium Joints Join Production Ranks, by T. H. Mallin, July 22 p 47

Vacuum Technology
GM Casts In-Plant Scrap into In-Plant Steel, by W. G. Patton, Dec 9 p 53

Valeron Corp.:
Extend Use of Throw-Away Carbide Inserts, Dec 16 p 31

Valmont Industries
High Speed Welding Builds Tapered Tubing Into Light Poles, by B. D. Wakefield, Oct 28 p 51

Van Dorn Plastic Machinery Co.:
Industrial Robot is Anchor Man in Plastic System, Nov 11 p 29
It's a Plastic World for Capital Spending, by K. W. Bennett, Nov 11 p 49

Vanguard Abrasives Div.:
Industrial Diamond Future Begins to Sparkle, by K. W. Bennett, Sept 23 p 46

Van Straaten Chemical Co.:
Cutting Fluid Preservation Beats Dumping, by J. J. Obrzut, Dec 23 p 37

Vapor Corp.:
NC Lathe Paces Upturn of Profits, by J. E. Sanford, Dec 23 p 43

Vaule & Co., Inc.:
Productivity: Work Smarter, Not Faster, by T. H. Malim, Oct 7 p 57

Versatran Div.:
Best Seller '72: 'Run, Robot, Run', by K. W. Bennett, Dec 23 p 26

Verson Allsteel Press Co.:
NEP Myth: 'Too Early to Tell', by K. W. Bennett, Aug 26 p 41

Vic Mfg. Co.:
Must Small Plants Go Down the Drain? by J. J. Obrzut, July 1 p 49

Volkswagen AG
Beetlemakers Bugged on Profit Decline Making New Minicar? Dec 2 p 27

Beetles Will Not be Hibernating Despite 'Freeze', by D. N. Williams, Oct 21 p 61

ESVs Could be ESP of Future Car Design, by D. N. Williams, Sept 30 p 19

Nixon's Game Plan: From Slow to Stop, by K. A. Kaufman, Aug 19 p 35

Volkswagen Hurt in Orders Brake, Metalworkers Strike, Dec 16 p 27

Vulcan Mold and Iron Co.:
Patterns Find Coating in Urethane, Sept 9 p 70

W

Wages and Prices

AFL-CIO Seeks Delay of Nixon's Control Powers, Nov 4 p 21
And Now Introducing (Ta-Tah) Phase III, by J. D. Baxter, Oct 14 p 35

Building Trades Lay Foundation for Pay Board, by K. A. Kaufman, Nov 4 p 23

Business on Profits: What Excess? by G. J. McManus, Sept 23 p 45

Can Price Board Afford the Aspirin it May Need? by K. A. Kaufman, Oct 28 p 18

Can You Win an Election and Still Halt Inflation? by K. A. Kaufman, Dec 23 p 21

Compromise, Troika-Type Board Seen in Phase II, by K. A. Kaufman, Sept 23 p 44

Cracks Develop Before Phase II Even Starts, Oct 14 p 35

Industry: Bold Tip-Toe Through Maze II, Nov 18 p 43

Labor Leaders Will Fight for Phase II Pay Raises, by K. A. Kaufman, Oct 21 p 23

Labor Wants a 'Thaw': Says Freeze is Unfair, Sept 9 p 21

Meany Stays in Bold Defiance of NEP, Nov 25 p 19

Mr. Meany, Please Calm Down! by Gene Beaudet, Dec 2 p 5

NEP Bonus: Keeping Workers Off the Bricks, Nov 18 p 21

Nixonomics: Phase I to Haze II to Blue Funk? by J. M. Beattie, Nov 4 p 50

Only 2 More Guessing Days to Phase II? by K. A. Kaufman, Nov 11 p 51

Pav Board: Abel, Hodgson and More Fat Cats to Come, Dec 16 p 21

Payboard Meets its First Test—Mineworkers, Oct 21 p 21

Pay Board: The Pawn in Nixon-Meany Tilt, by K. A. Kaufman, Dec 9 p 21

Phase II: Are its Clouds a Shroud? by K. A. Kaufman, Nov 18 p 41

Phase II: Headed for Trouble, Oct 7 p 47

Phase II's Go or No-Go Prospects Rated, by D. N. Williams, Nov 25 p 58

Steel Summary: Quick Test for Price Guidelines? Nov 11 p 85

Stein on Phase II: More Involved than We Thought, by K. A. Kaufman, Nov 4 p 23

Tax Credit: A Spending Spring-coming, by G. J. McManus, Dec 9 p 39

The Two Faces of Phase II Pricing, by G. J. McManus, Dec 9 p 39

UAW Gets Cold Shoulder from Wage Freezers, Oct 7 p 21

UAW Looks for a Good Way to Skate Around Freeze, Oct 14 p 17

Wage Gains Weaken a Bit for First Nine Months, Nov 4 p 21

Was Steel's Struggle in the Wage-Price Web Turning Point Toward New Economy? by G. J. McManus, Sept 9 p 55

What Pay Board Will—and Won't—Do, by K. A. Kaufman, Dec 2 p 62

What System Will Wage Board Really Use? Oct 28 p 16

Who'll Get Chill in Freeze Phase III? by K. A. Kaufman, Sept 16 p 64

Why Not Freeze Profits, Too, by Gene Beaudet, Oct 14 p 5

Why Old King Coal Isn't Very Merry, by K. A. Kaufman, Dec 9 p 41

Will the Whole Thing Fall Apart? by Gene Beaudet, Nov 11 p 5

Walker Forge, Inc.:
Forgers Get Hot for Furnaces, by K. W. Bennett, Oct 7 p 52

Wallace-Murray Corp.:
Grinding Industry Turns to Alolved Abrasive, by J. J. Obrzut, Oct 28 p 48

Warner & Swasey Co.:
Giant Machines Change the Game, by J. E. Sanford, Aug 12 p 71

Is Inventory Spurt Now in Stock? Sent 31 p 73

Machine Tool Builders Wait for NEP Order Fallout, Sent 2 p 13

Machine Tool Orders Up—with 'Hope', by R. A. Wilson, Sept 30 p 35

Order Surge Looms for Textile Machinery Makers, by K. W. Bennett, July 29 p 26

Time Running Out on Tooling White Sale? by R. A. Wilson, Oct 21 p 60

Warner Electric Clutch and Brake Co.:
Nixon's Game Plan: From Slow to Stop, by K. A. Kaufman, Aug 19 p 35

Washington, D. C. - Department of Human Resources
Technology: It's Great—for Things, Not People, by S. E. Lehman, July 22 p 36

Washington News Report—Weekly Interpretation of Legislation and Other Government (See Also K. A. Kaufman)

Waste Management
'Clean Town' Cashes in on Daily Dirt, by R. A. Wilson, Sept 2 p 36

Put Out the Garbage and Bring in a House? by J. M. Beattie, Nov 25 p 57

Waterbury Farrel Co.:
Carbide Makers Get Hip with HIP, by R. A. Wilson, Sept 9 p 51

Optical Gaging Speeds Design Time on New Products, by T. H. Malim, Dec 9 p 59

Wean-United, Inc.:

R&D Layoffs Cut Into Industry Muscle, by G. J. McManus, Oct 28 p 27

Weirton Steel Div.:

More Metal Cans Get Chromium Coats, July 15 p 61

Welding

Estimating Aluminum Welding Costs the Easy Way, Oct 21 p 74

High-Speed Pulsating Welding Unit Jumps Mill Output of Stainless Tubing, by B. D. Wakefield, Dec 2 p 72

High Speed Welding Builds Tapered Tubes Into Light Poles, by B. D. Wakefield, Oct 28 p 51

Plasma Cutting Takes on Steel, by R. R. Irving, Aug 26 p 62

Russian ESR Technology is 'Heavy', by N. B. Schwartz, July 8 p 45

Stainless Welding Shields Itself, by R. R. Irving, July 1 p 54

System Speeds Up Vertical Welding of Structures, Nov 18 p 31

Technology Bank Draws Interest, by T. C. DuMond, July 29 p 39

There's More to Lasers than Light, by J. E. Sanford, Oct 14 p 49

Thin-Wall Tubing Allures Steelmakers, by B. D. Wakefield, Sept 30 p 59

S. K. Wellman Div.:
Industry Warms Up to Supercold, by R. A. Wilson, Aug 26 p 55

Wendel-Dideler Co. (France)
That 'Blue Sky' on Steelmaking's Horizon, by G. J. McManus, Dec 2 p 65

R. D. Werner Co., Inc.:
Oxy-Fuel Flames Fan Hot Metal, by R. R. Irving, Sept 2 p 45

Western Electric Co.:
Phasmodom Strikes Again—Now it's Systems, by R. A. Wilson, Dec 16 p 62

Western Electronic Manufacturers Assn.:
Try 4/40, You'll Like It—or Will You? by P. J. Cathey, Dec 23 p 35

Westinghouse Electric Corp.:
Fed Wage Control: Management's Wary, by G. J. McManus, July 15 p 46

Forgers Get Hot for Furnaces, by K. W. Bennett, Oct 7 p 52

Giant Machines Change the Game, by J. E. Sanford, Aug 12 p 71

Industry Gets Together on Floating Power Stations, Aug 26 p 27

M-G Sets Pull Current from SCR Drives, by R. A. Wilson, July 15 p 47

Nixon Defrosts New Compact Appliances, by K. W. Bennett, Sept 9 p 53

R&D Layoffs Cut Into Industry Muscle, by G. J. McManus, Oct 28 p 27

Westwind Air Bearing Div.:
Air Bearings Make Machining a Breeze, by W. G. Patton, Aug 19 p 50

Wheeling-Pittsburgh Steel Corp.:
Blocks and Blankets Reline Furnace as Anchor Pin Makes Short Work of Project, by J. J. Obrzut, Dec 16 p 79

Cracks Develop Before Phase II Even Starts, Oct 14 p 35

Inland Sinks Post-Contract Steel Hike, by G. J. McManus, July 1 p 40

Nixon's Game Plan: From Slow to Stop, by K. A. Kaufman, Aug 19 p 35

Recycling Could Upset Scrap Industry, by G. J. McManus, July 1 p 39

Steel Summary: Coming on Strong by End of the Year? Sept 2 p 59

Steel Summary: Slow, So Slow an Improvement, Oct 14 p 63

Steel vs USWA: An Imposible Mix, by G. J. McManus, July 29 p 23

White Motors Corp.:

Executive Search Frustrates Top Brass, July 8 p 27

Whitehead Group of Companies

Industry: Bold Tip-Toe Through Maze II, Nov 18 p 43

W. A. Whitney Corp.:

Growth, Change: Is NC Ready to Move Ahead? by K. W. Bennett, July 8 p 38

Whittaker Corp.:

Powder Metallurgy: A Sleeping Giant, Oct 7 p 63

Wickes Corp.:

Best Seller '72: 'Run, Robot, Run', by K. W. Bennett, Dec 23 p 26

Wilkerson Corp.:

Put it All Together—Products, Profit, Growth, by K. W. Bennett, Oct 28 p 37

Frank S. G. Williams & Associates
Engineering Decisions are for Engineers July 22 p 49

Williams Bros. Canada Ltd.:

Gas Pipeline Challenges the Elements, by B. D. Wakefield, Nov 25 p 71

Williams Research Corp.:

Turbine Engine Faces Ultimate Pollution Test—in New York, by D. N. Williams, Dec 23 p 20

Wilpette Corp.:

Mill Equipment: Color it Black with Gray Streaks, by G. J. McManus, Oct 7 p 53

Worera Process

See Concise Riotinto of Australia, Ltd.

Wyman-Gordon Co.:

Aerospace Forgers Find Commercial Road Narrow, by R. A. Wilson, July 8 p 36

X

Xerox Corp.:

How to Win Friends with and Influence Management, Oct 21 p 29

Profit Plans: They Gotta Have Heart, by J. D. Baxter, Sept 16 p 71

X-Rays

X-Ray System Makes Use of Paper Instead of Film, Oct 28 p 21

Y

Youngstown Sheet & Tube Co.:

Inland Sinks Post-Contract Steel Hike, by G. J. McManus, July 1 p 40

Nixon's Game Plan: From Slow to Stop, by K. A. Kaufman, Aug 19 p 35

That 'Blue Sky' on Steelmaking's Horizon, by G. J. McManus, Dec 2 p 65

Youngwood Electronic Metals Co.:
Is Inventory Spurt Now in Stock? Sept 30 p 33

Z

Zinc

How to Beat the Metals Slump—or 'Think Zinc', by James Beizer, Dec 23 p 51

Is Zinc Heading for Dual-Pricing System? by James Beizer, Oct 28 p 61

Mining in New York? It's Way Back, by James Beizer, Oct 7 p 119

Price Moves Dominate—Up, Down, Hesitant, by James Beizer, Aug 5 p 67

AUTHOR INDEX

B
Baxter, J. D.
 And Now Introducing (Ta-Ta-Tab) Phase III, Oct 14 p 35
 The Mood Block Cracks, July 8 p 34
 Profit Plans: They Gotta Have Heart, Sept 16 p 71
 World Looks for Phase II on Trade Policy, Nov 25 p 55

Beattie, J. M.
 Has Industry-Campus War Lost its Bang? Dec 2 p 58
 Is this Industry Forging Ahead—or Behind? Dec 2 p 59
 Nixonomics: Phase I to Haze II to Blue Funk? Nov 4 p 50
 Politics Kicks Around Chrome, Oct 28 p 33
 Pollution Abroad: Fined First, Explained Later, Oct 28 p 30
 Put Out the Garbage and Bring in a House? Nov 25 p 57
 What's in Russia's Bag of Exports? Dec 9 p 42

Beaudet, Gene
 The Adversary Complex Has Got to Go, July 29 p 5
 Are You Too Small to Be Good? Sept 23 p 5
 Business' Obligation to . . . (Fill In), July 15 p 5
 Could you Keep Them Awake Next Monday Morning? July 1 p 5
 Don't Leave the Job to Hired Hands, Dec 9 p 5
 Equipping the System for Survival? Aug 19 p 5
 Help Yourself to a 100 pct Return, Oct 21 p 5
 Hope Comes from Facing the Truth, Dec 23 p 5
 Is Mr. Nixon the Only One Who's Changed? Sept 30 p 5
 The Last Gasp of a Cycle . . . Hopefully, Aug 12 p 5
 Let's Put this One in the Footnotes, Nov 25 p 5
 Mr. Menny, Please Calm Down! Dec 2 p 5
 Music from Mexico—and It's Steel Not Tijuana Brass, Oct 14 p 40
 The New Trauma Afflicting U.S. Business, Nov 4 p 5
 Pollution from the Antitrusters, Oct 7 p 5
 Productivity is Where the Heart Is, Sept 16 p 5
 Q & A On the Big Giveaway, Sept 9 p 5
 There's More to it Than Productivity, July 22 p 5
 These Days it Takes Two to Tango, Nov 15 p 5
 This is No Time to Stop Biting the Bullet, July 8 p 5
 What Else is There Left to Do? Sept 2 p 5
 Whom Might the Nixon Program Help Most? Oct 28 p 5
 Why Did This Have to Take Three Months? Dec 16 p 5
 Why the Full Shock Treatment Was Needed, Aug 26 p 5
 Why Not Freeze Profits, Too, Oct 14 p 5
 Will the Whole Thing Fall Apart? Nov 11 p 5
 The Worst Trade Balance Since 1893? Aug 5 p 5

Beizer, James
 After the Walts: Will Copper Price Sit it Out? July 29 p 45
 Alean's Arvida Rolling Mill: The Envy of the Industry, Sept 23 p 51
 Allende Claims He Got a Pig in the Copper Poke, Nov 11 p 50
 Aluminum Industry Easing Out of Doldrums, Nov 4 p 52
 Aluminum Prices: Sick Patient Deals in Black Humor, Sept 30 p 55
 Aluminum Refuses Realistic Pricing After Big Cut, Oct 14 p 65
 Aluminum Shipments Up 4 Pct in First Half '71, Sept 9 p 101
 And Don't Bet on Payoffs in Chile Either . . . Oct 21 p 59
 Antidote for Ill Aluminum: Cutbacks, Profits, Research, Sept 16 p 121
 Anacro—the Fly in the Lead-Price Ointment, Dec 16 p 65
 "Bargaining Fat" in Puerto Rico?, Oct 21 p 107

Chile, Something for Nothing? Oct 7 p 50
 Copper Executives Weren't Told the Whole Story, Oct 28 p 61
 Copper is Metals' Newest Pauper, Dec 23 p 29
 Copper: Measuring High Cost at 50 Cents a Lb, Oct 21 p 107
 Copper Pricing: An End to Tail Wagging the Dog? Aug 19 p 61
 Copper Strike Has Silver Lining, July 8 p 40
 Copper Strike Settlement Might be a Long, Long Wait, July 15 p 77
 Electronic Crystal Ball Predicts Copper Prices, July 8 p 77
 Even Aluminum Clouds Have Silver Linings, Dec 16 p 97
 How to Beat the Metals Slump—or, "Think Zinc", Dec 23 p 51
 If at First You Don't Succeed—Wait Until Next Year, Dec 9 p 79
 Investing in Australia? Don't Be an Ugly American, Sept 2 p 61
 Is Zinc Heading for Dual-Pricing System? Oct 28 p 61
 Justice Dept. Hits Reynolds in Antitrust Suit, July 22 p 63
 Latin Deposits: A Banker's Game, Aug 19 p 38
 Lead Price Fluctuation: Much Ado About Nothing, July 1 p 81
 Let George Do It—Copper Industry's Answer to Pricing, Dec 2 p 83
 Mining in New York? It's Way Back, Oct 7 p 119
 Mining Law Turns into Great Debate, Sept 30 p 36
 Mining Losses Dim Las Vegas Lights, Oct 21 p 59
 New Who's Who Follows Anacron's Corporate Bloodbath, Nov 18 p 89
 Nonferrous Second Quarter: Nonfantastic, Aug 12 p 109
 Nonferrous Ventures Prepare for Better Days, Sept 16 p 67
 Only During the Depression Were Earnings Worse, Nov 11 p 87
 Prawn Looks at Copper's Future: Expensive, Nov 4 p 85
 Price Moves Dominate—Up, Down, Hesitant, Aug 5 p 67
 Response to NEP: Good, Bad and Ugly, Aug 26 p 67
 What Else is There Left to Do? Sept 2 p 5
 The World Takes Inventory of its Aluminum Problems, Nov 25 p 109

Bennett, K. W.
 About '72—Optimism is Busting Out, Dec 16 p 59
 Best Seller '72: 'Run, Robot, Run', Dec 23 p 26
 Big, Big Computer for Inventory Woes, Oct 7 p 51
 Big Electric Auto Buy Lights Up Builders, Nov 4 p 51
 A Bird? A Plane? No, Supercomputer!, July 15 p 44
 Boob Tube Bis Bofos, July 8 p 39
 Construction Rigs Bulling for '72 Power Uphrust, Nov 18 p 46
 Diversifying: Everybody into the Act, July 29 p 29
 Dollar Float Stalls Steel Importers, Oct 28 p 29
 Ecology: After Lacing Industry EPA Cracks its Whip at Cities, Oct 21 p 62
 EDM-Winging Well Without Aerospace, Dec 2 p 53
 Factory Housing: High Rising Sales, Aug 5 p 42
 Farm Machines: A Bad Year Brightens, Sept 16 p 63
 Forgers Get Hot for Furnaces, Oct 7 p 52
 Growth, Change: Is NC Ready to Move Ahead? July 8 p 38
 Hope for Industry—by the Numbers, July 22 p 37
 Industrial Diamond Future Begins to Sparkle, Sept 23 p 46
 Ingersoll Upstages Bad Year with DNC Grinder, July 22 p 35
 Instant Motels: Only Gideon's Bible isn't Pre-Fabricated, Dec 2 p 57
 It's a Plastics World for Capital Spending, Nov 11 p 49
 Little Steel Moves Into the Big Time, Sept 2 p 37
 MT Mission to Moscow: Great Success, July 1 p 35
 Magnet Makers Magic Motors Make Money? Nov 25 p 59

Chile Copper Crisis Gets Warmer Again, Dec 9 p 79
 Medical Hardware: Diagnosis Prosperity, Sept 2 p 32
 Modular Homes: A Gold Mine or Land Mine? Nov 11 p 54
 Modular Homes: Sizzle Fizzles, Dec 9 p 44
 NEP Myth: 'Too Early to Tell', Aug 26 p 41
 Nixon Defrosts U.S. Compact Appliances, Sept 9 p 53
 Order Surge Looms for Textile Machine Makers, July 29 p 26
 Put it All Together—Products, Profit, Growth, Oct 28 p 37
 Slit a Foil; Make a Heater; Build a Plant, Nov 25 p 61
 That Little Black Box in the Closet is a Slow Comer, Dec 9 p 43
 Tomorrow's Growth Market, Refrigerators? Oct 14 p 39
 Who's in Charge When Computers Meet? Aug 12 p 60

Black, I. G.
 USSR Oil Leak: A Warning to Alaska's Pipeliners? July 8 p 41

C
Caihey, P. J.
 Economic Computers Don't Agree on Freeze's Effects, Sept 16 p 65
 Final Say on Promotions—Let Boss' Boss Decide, Oct 21 p 66
 Try 4/40, You'll Like It—or Will You? Dec 23 p 35

Cunningham, H. H.
 Why Are there So Many Fasteners? Aug 19 p 44

D
DuMond, T. C.
 Aluminum Shows Steel How to Get Flat Sheet, Dec 9 p 60
 Automakers Like "Gluing", Aug 19 p 48
 Engineering Plastics: The Pressure is On, Oct 21 p 71
 Master Plan Develops Master Plan, Sept 16 p 84
 Steels Suit Golf Clubs to a Tee, Aug 5 p 51
 Superplasticity Pulls Ahead in Metal Forming, Nov 18 p 66
 Technology Bank Draws Interest, July 29 p 39

G
Greene, A. M.
 A Small Service Center's Challenge, Aug 5 p 57

H
Hayden, Scott
 Lackawanna: To Be or Not to Be? Dec 2 p 56
Hockenberry, S. H.
 Are Worker's Rights Only Part-Time? July 15 p 50
 Don't Hire Drones—You'll be Better Off, Nov 4 p 56
 Losing Management Touch? Blame the Megrim, Nov 18 p 49
 SBA Carries Water for Those Who Won't Drink, Nov 25 p 65
 Shed No Tears for the Planner, Sept 30 p 41
 'Things Aren't Bad Enough Yet', Aug 26 p 49
 Transit Poker Draws a Crowd, Sept 23 p 41
 Where Have all the Premises Gone? July 8 p 42
 Who Wears the Badge Around Here? Aug 12 p 65

I
Irving, R. R.
 'Argon-Oxygen' Brings New Life to Stainless, Nov 11 p 61
 Continuous Inoculation: The New Grain Refiner, Oct 28 p 44
 Fasteners Start Switch to Metric, Aug 5 p 55
 Oxy-Fuel Flames Fan Hot Metal, Sept 2 p 45
 Plasma Cutting Takes on Steel, Aug 26 p 52
 Press Brake Goes for Broke, Sept 2 p 52
 Stainless Welding Shields Itself, July 1 p 54

J
Jamieson, Robert
 U.S.-Canada Automaker Pact May Finally Get Changed, Dec 9 p 44

K
Kaufman, K. A.
 ADR Wins Final Approval with Few Major Changes, July 1 p 41
 After the 90-Day Freeze—NEP, Phase Two, Sept 2 p 22
 Big Jump in Russian Trade Stalled Until Nixon Visit, Nov 25 p 56
 Building Trades Lay Foundation for Pay Board, Nov 4 p 23
 Can Price Board Afford the Aspirin it May Need? Oct 28 p 18
 Can You Win an Election and Still Halt Inflation? Dec 23 p 21
 Celler Asks Appointment of Anti-Trust Czar, Sept 16 p 21
 Chrome and Politics Provide Ingredients for Senate Stinger, Oct 14 p 19
 Compromise, Troika-Type Board Seen in Phase II, Sept 23 p 44
 Congress Gives Nixon's Plan Mixed Reviews, Aug 26 p 21
 Conversion to Metrics: Costly and Confusing, Aug 5 p 45
 Corporate Secrecy: Nader Finds Himself Some New Raiders, Nov 18 p 23
 Ekim's New Style: More Bucks, Less Red Tape, Dec 23 p 31
 Government Made a Friend—Business, Aug 26 p 45
 Hartke Pressures for Voluntary Import Limits, Aug 5 p 43
 Hazardous Products: Who Watches the Watchdog? July 29 p 17
 Investment Credit, Fast Write-Offs Get Senate Nod, Nov 4 p 48
 Japanese Open Door for New Steel Quota Plan, Sept 9 p 52
 Job-Bias Bill Heads for Tough Senate Scrap, Sept 30 p 17
 Kama River Caper: Scene Three, Aug 19 p 32
 Labor Leaders Will Fight for Phase II Pay Raises, Oct 21 p 23
 Lockheed May be Last Loser to Get Help, Aug 12 p 21
 Lockheed May Pave the Way for More Corporate Aid, July 1 p 21
 NEP: Is More Tax Relief in the Cards? Sept 2 p 36
 Nader and Common Cause: Stamp Out Fast Write Offs, July 15 p 23
 "New Realism" Urged in U. S. International Relations, Sept 23 p 23
 A Nice, Slow, Soggy Recovery, July 15 p 43
 Nixon Pressured to Make Incomes Policy Moves, July 1 p 38
 Nixon's Game Plan: From Slow to Stop, Aug 19 p 35
 No Tight Rein on Interest Rates if Phase II Works, Nov 11, p 21
 OSHA Enforcement: You Haven't Seen Anything Yet, Dec 23 p 21
 Only 2 More Guessing Days to Phase II? Nov 11 p 51
 Optimism Grows for NEP's Inflation-Cutting Impact, Sept 9 p 23
 Pay Board: The Pawn in Nixon-Menny Tilt, Dec 9 p 21
 Pension-Plan Law Prospects Get a Lift from Nixon, Dec 16 p 63
 Phase II: Are its Clouds a Shroud? Nov 18 p 41
 Playing that Same Old Import Surcharge Song, Dec 2 p 23
 The Price Commission with a Credibility Gap? Dec 16 p 61
 Prices: What You Want isn't Always What You Get, Dec 2 p 60
 Shultz: Still the Economic Guru of the Nation, July 8 p 21
 Steel Pact: Forebodings Future Nixon Watchdogging, Aug 19 p 17
 Steel Pact: Now the Hangover Begins, Aug 5 p 39
 Steel Talks: Along Came Nixon, July 8 p 37
 Stein on Phase II: More Involved than We Thought, Nov 4 p 23
 Tax Credit: Just About in the Bag, Dec 9 p 21
 Tool, Die Industry Blasts Senate Sale Bill, Oct 21 p 23

Trade Aid: Fed Hints at Easing Antitrust Laws, Aug 5 p 19
Trade Talk: Cattle Barons, Car Jocks, and Whipping Boys, Nov 25 p 21
Treasury Rescues Quick Write-Offs from Mills Ax, Sept 30 p 37
Up There, Where the Air is Rare—It's Expensive, July 22 p 19
Water Pollution: How Much is Public Willing to Pay? Dec 16 p 23
What Nixon Wants Before Officially Devaluing Dollar, Oct 7 p 21
What Pay Board Will—and Won't—Do, Dec 2 p 62
Who'll Get Chill in Freeze Phase II? Sept 16 p 64
Why Old King Coal isn't Very Merry, Dec 9 p 41
You Can't Have Your Political Cake and Tax Credit—Maybe, Dec 2 p 23

L

Lehman, S. E.
Technology: It's Great — for Things, Not People, July 22 p 36

Mc

McManus, G. J.
Business on Profits: What Excess? Sept 23 p 45
Coal User's Dilemma: Boyle Fiddles, but What's Left to Burn? Nov 11 p 52
Cyclops Introduces Electron Beam Stainless, Nov 25 p 62
Economy: No Relief and No Hope? Aug 12 p 57
Fed Wage Control: Management's Wary, July 15 p 46
Ford's Newest Idea: A Bigger Hot-Strip Mill, July 22 p 33
HyL is Going Strong South of the Border, Nov 18 p 58
Holding Furnace Keeps Heat on Molten Metal, Nov 25 p 78
Inland Sinks Post-Contract Steel Hike, July 1 p 40
Is America Getting Red Carpet Treatment? Dec 9 p 42
Is Labor on its Last Ego Trip? July 22 p 31
Labor Talks Flow Despite Freeze, Sept 30 p 39
Lagging Economy Calls for the Whip, Aug 19 p 39
Materials: Stress Use, Not More R&D, Nov 25 p 62
Mergers: Profits are in the Giving, July 22 p 38
Mill Equipment: Color it Black with Gray Streaks, Oct 7 p 53
Mills Think Market Will Sustain Approved Price Hikes, Dec 16 p 61
Prices: What You Want isn't Always What You Get, Dec 2 p 60
Q-BOP: The New Big Bopper in Steelmaking? Dec 23 p 28
R&D Layoffs Cut Into Industry Muscle, Oct 28 p 27
Recycling Could Upset Scrap Industry, July 1 p 39
A Rolling Mill Gathers No Money in a Deep Freeze, Nov 18 p 45
Steel Begins to Lay Old Warriors to Rest, Dec 16 p 64
Steel Pact: Now the Hangover Begins, Aug 5 p 39
Steel Talks: Power to the Man-hour? July 15 p 41
Steel vs USWA: An Impossible Mix, July 29 p 23
Steel's Quarter was a Full Disaster, Nov 21 p 47
That 'Blue Sky' on Steelmaking's Horizon, Dec 2 p 65
Tool Steels Take the ESR Road, Sept 23 p 55
The Two Faces of Phase II Pricing, Dec 9 p 39
U. S. Trade Whistle Deafens World Steel, Oct 21 p 57
Was Steel's Struggle in the Wage-Price Web Turning Point Toward New Economy? Sept 9 p 55

M

Molim, T. H.
Adhesive Bonding Holds Plated Strip to Cast Iron Ways, Oct 21 p 78
Charpy Learns a Lot of New Tricks, Nov 25 p 76
Computer Guides NC Punching, Sept 23 p 58
Felt Goes into Outer Space, July 1 p 56
Heat-Treat Rules: Time for Change? Aug 26 p 57
Hydrogen-Powered Car is Smog-Free but Not Trouble-free, Oct 14 p 55
Now, Titanium Parts from Powder, Nov 18 p 60
Optical Gaging Speeds Design Time on New Products, Dec 9 p 59
Plasma Coatings Improved in Hardness, Density, Sept 23 p 62
Productivity: Work Smarter, Not Faster, Oct 7 p 57
A Quantum Jump in Electroplating? July 15 p 57
System Holds Line to Tight Specs, Oct 7 p 69
Titanium Joints Join Production Ranks, July 22 p 47
Urethanes Foam into Injection Molding, Dec 23 p 40

N

Neal, H. R.
The Story Behind Mack Trucks and the Kama River, Dec 9 p 47

O

Obrzut, J. J.
Blocks and Blankets Recline Furnace as Anchor Pin Makes Short Work of Project, Dec 16 p 79
Cutting Fluid Preservation Beats Dumping, Dec 23 p 37
Forging Equipment Teamwork Strikes Competitive Blow, Oct 21 p 76
Grinding Industry Turns to Alloyed Abrasive, Oct 28 p 48
Make Room for Powder Coatings, Sept 2 p 48
Must Small Plants Go Down the Drain? July 1 p 49
PM Forging Logjam Starts to Break Up, Nov 11 p 64
Some Plants Never Fade Away, July 8 p 50
Teflon for Heat Exchanger Tubing? Sept 9 p 65

P

Polton, W. G.
Air Bearings Make Machining a Breeze, Aug 19 p 50
A 'Crash' Program Under Way for New Bumpers, Nov 4 p 60
Crystal Gazing: Manufacturing's Future, July 1 p 44
Foundries Face Up to the Crisis, July 29 p 35
GM Casts In-Plant Scrap into In-Plant Steel, Dec 9 p 53
Needed: The Right Alloys to Tame Automobile Exhaust Emissions, Sept 30 p 44

S

Sandford, J. E.
Carbide Fabric Dresses Up Parts, July 22 p 50
Carbide Tooling Gains an Edge, Dec 9 p 56
Flame Cutting Warms Up to NC Tape, Aug 5 p 44
GE Plants the Seed Money to Make NC Boom, Nov 11 p 53
Giant Machines Change the Game, Aug 12 p 71
Industry's Quiet Rush to Silence, Dec 16 p 73
Mr. 'Mack' Knives through Kama River Fog, by J. E. Sandford, Nov 18 p 44
Mill Melts Almost 150 Alloys, July 15 p 64

NC Lathe Faces Upturn of Profits, Dec 23 p 43
Overseas Builders Press U.S. Lead in NC Technology, Nov 25 p 60
Surviving the Electronic Deluge, Nov 11 p 57
There's More to Lasers than Light, Oct 14 p 49

Schwartz, N. B.

Russian ESR Technology is "Heavy", July 8 p 45
Suchocki, C. J.
AMC's Warranty: Consumerism is in the Eye of the Beholder, Oct 28 p 32
All About OSHA—or Don't Press Your Luck, Dec 16 p 68
Medical Hardware: Diagnosis Prosperity, Sept 2 p 32

W

Wakefield, B. D.

Ceramic Cocoon Blocks Metal Oxidation, July 8 p 52
Closed-Loop System Sets the Trap for Shortages in Critical Parts, Oct 21 p 77
Computer Takes Heat Off Melt Shop, Sept 23 p 60
'Fussy' Deburs the Inaccessible, Aug 12 p 78
Gas Pipeline Challenges the Elements, Nov 25 p 71
High-Speed Pulsating Welding Unit Jumps Mill Output of Stainless Tubing, Dec 2 p 72
High Speed Welding Builds Tapered Tubes into Light Poles, Oct 28 p 51
Holes: That's Where Your Money Goes, July 22 p 43
Hybrid Line Cuts Trapezoids, Oct 28 p 47
Litton Launches its First Ship, July 8 p 48
Precoated Aluminum Gets Tough Finish, Nov 4 p 65
Thin-Wall Tubing Allures Steelmakers, Sept 30 p 50
U.S. Shipyards Turn the Corner, Sept 16 p 77
What Happens when Safety Inspector Comes to Town? Oct 14 p 38
Wooden Pallets Can be a Materials Handling System, Dec 2 p 71

Williams, D. N.

'An Oil Gage is an Oil Gage is an Oil Gage', Aug 26 p 23
... and General Motors Changes Around, Too, Dec 16 p 64
Auto Headache No. '72: Emissions and Imports, Sept 16 p 23
Automakers Turn on as Wankel Engine Starts to Purrr, Oct 14 p 21
Auto Pollution: If You Smoke, Don't Drive, Aug 19 p 19
Auto Prophecy: The Universal Engine, Sept 2 p 39
Automotive Suppliers Walk Shaky Tightrope, July 22 p 20
Beetles Will Not be Hibernating Despite 'Freeze', Oct 21 p 61
'Big Two' Automakers: A Hale and Hearty Season, Aug 5 p 20
Can Detroit Weather Potomac Storm? July 29 p 25
Chrysler, AMC Blot out the Red, July 29 p 18
Competitive Race Proves too Much for Federal's Bearings, Nov 4 p 53
Crystal Gazing: Manufacturing's Future, July 1 p 44
Detroit's New 'Mixtrics' is Not All Feet, Oct 7 p 25
Different Strokes for Different Folks, Aug 12 p 62
Dummies Died—But Some Only Slightly—in GM Safety Car, Nov 4 p 25
ESVs Could be ESP of Future Car Design, Sept 30 p 19
Economic Computers Don't Agree on Freeze's Effects, Sept 16 p 65
Electro-Controls Are, Well, Coming—Are Coming ... Oct 21 p 25
Electronic Ignition: \$35 and a Bag of Strange Parts, Nov 11 p 23

Ford Adds Foreign Free-Form Scanner, Sept 23 p 43
GM is Out in Front with Bumpers that Bump, Sept 9 p 25
GM Molding a Giant Step for Casting? Dec 23 p 30
General Motors: In the Midst of Metamorphosis, Sept 23 p 25
Henry Ford Looks into Auto's Crystal Ball, Dec 16 p 25
Innovation: Who You Ask Decides What You'll Get, Oct 7 p 49
Is Bendix Laughing All the Way to Technology Bank? Dec 9 p 23
Is Monopoly GM's Favorite Game? July 1 p 23
Is a Turbine Battle Shaping Up? Sept 2 p 35
Is it True What They Say About Chevys? Dec 2 p 25
Manage Your Output, Not Your Input, Oct 14 p 44
Mass Transit Mess: There's a Market Here Somewhere, Nov 25 p 23
'Messing Around with Design' Shifts Gears at Ford, Nov 18 p 25
1972: A Move-It-or-Lose-It Year for AMC, Aug 12 p 23
Phase II's Go or No-Go Prospects Rated, Nov 25 p 68
Robot Movie Stars at Ford as Use Increases, Sept 30 p 38
Safety Air Bag Inflated, Deflated in Three-Way Clash, Dec 23 p 31
Safety, Air Rules Affect Auto Materials Use, Oct 28 p 19
Safety + Emission Rules — Orders for Suppliers? July 15 p 25
Sales Wait for Post-NEP Vertigo to Subside, Sept 2 p 23
Turbine Engine Faces Ultimate Pollution Test—in New York, Dec 23 p 20
U.S.-Canada Automaker Pact May Finally Get Changed, Dec 9 p 44
Wankel Engine Nears Production Turnpike, Dec 9 p 45
Who's Got the Best Bumpers that Bump? July 8 p 23

Wilson, R. A.

Abrasives Slice Up the High Alloys, July 15 p 62
Aerospace Forgers Find Commercial Road Narrow, July 8 p 36
Assembly Machines Push Up Stream, Aug 12 p 59
Can Designers Use 'Nutating' Motors? Dec 9 p 58
Carbide Makers Get Hip with HIP, Sept 9 p 51
'Clean Town' Cashes in on Daily Dirt, Sept 2 p 38
Electrical Parts Given 'Withstandability' Ratings, Aug 12 p 77
How Fast Can Abrasive Machining Go? July 22 p 34
Industry Wars Up to Supercold, Aug 26 p 55
Is America Getting Red Carpet Treatment? Dec 9 p 42
Kama River Caper: Scene Three, Aug 19 p 32
M-G Sets Pull Current from SCR Drives, July 15 p 47
Machine Tool Orders Up—with 'Hope', Sept 30 p 35
Modular Drafting System Advances by Application Tiers, Nov 25 p 77
Phasedom Strikes Again—Now it's Systems, Dec 16 p 62
Processing Coil—You've Got to Have a System, July 29 p 24
Recovery Revives Executive Hopscotch, Sept 16 p 61
The Story Behind Mack Trucks and the Kama River, Dec 9 p 47
Time Running Out on Tooling White Sale? Oct 21 p 60
Tool Builders Cut Down by Phase II Doubts, Dec 2 p 55
Tool Buys: Ask More than the Obvious, Sept 23 p 49
Was Mack Sold Down the Kama River? Nov 4 p 49
Who Knifed Mack Out of the Kama Plant? Sept 23 p 47
Will Spring Tool Order Shower Last? July 29 p 27
Will U.S. Let Mack Hack it in USSR? Aug 5 p 41

